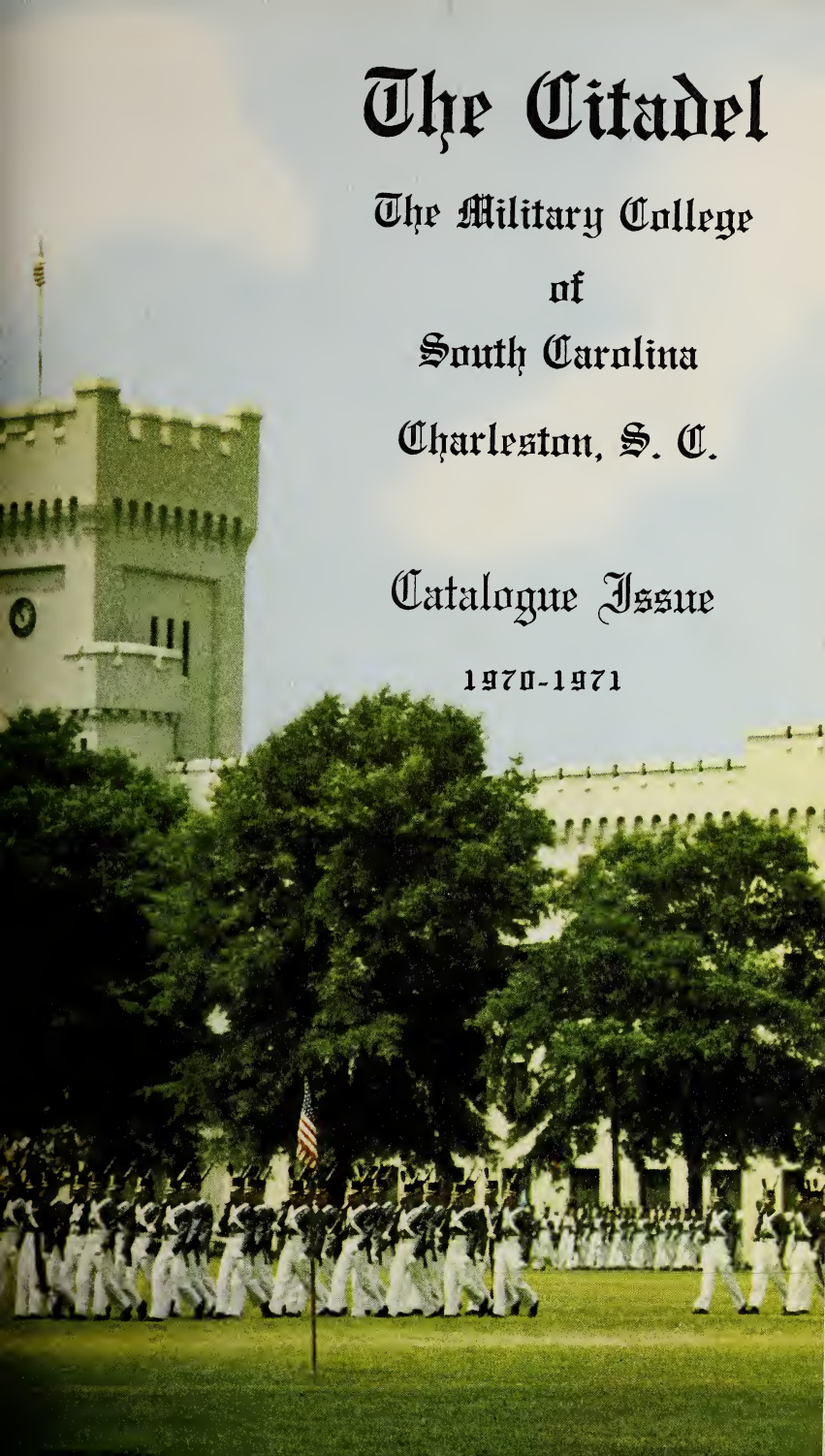
The Citadel

The Military College of South Carolina

Charleston, S. C.

Catalogue Issue

1970-1971



BULLETIN OF

THE CITADEL

THE MILITARY COLLEGE
OF SOUTH CAROLINA

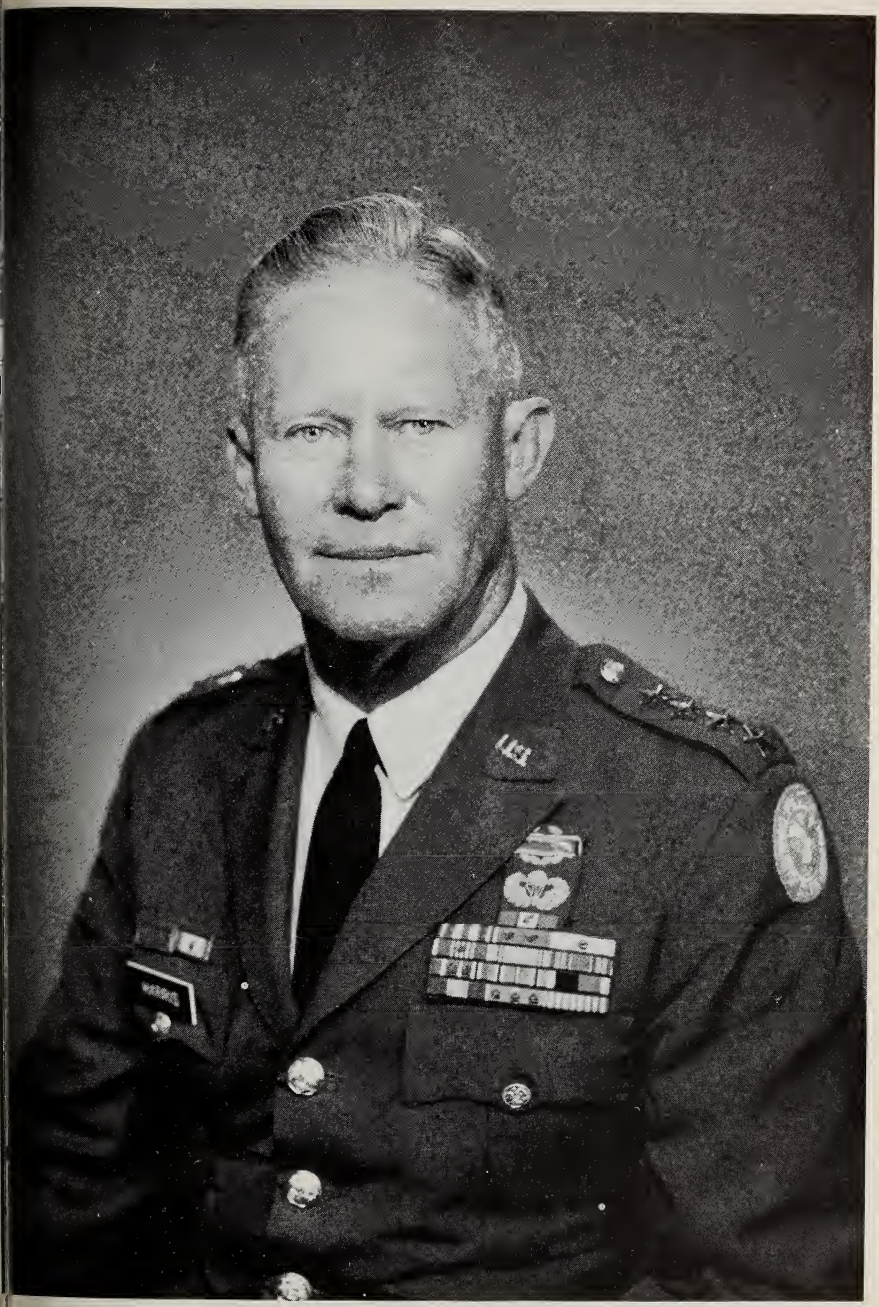
FOUNDED 1842

CATALOGUE ISSUE

1970-1971

CHARLESTON, S. C.

"I call, therefore, a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war."—MILTON.



GENERAL HUGH PATE HARRIS
PRESIDENT

GENERAL JAMES W. DUCKETT
Vice President

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1970

S M T W T F S

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1971

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29	30	31				

COLLEGE CALENDAR FOR 1970-1971

1970

SUMMER SCHOOL

June 8, Monday, 8:00 a.m.	First session begins
July 17, Friday	First session ends
July 20, Monday, 8:00 a.m.	Second session begins
August 21, Friday	Second sessions ends

FIRST SEMESTER

September 1, Tuesday, 9:00 a.m.	New Cadets report
September 8, Tuesday noon	Old Cadets report
September 9, Wednesday	Registration
September 10, Thursday	Classes begin
October 24, Saturday	Parents' Day (VMI)
November 21, Saturday	Homecoming (Davidson)
November 25, Wednesday noon	Thanksgiving recess begins
November 29, Sunday, 6:00 p.m.	Thanksgiving recess ends
December 17, Thursday noon	Christmas holidays begin

1971

January 3, Sunday, 6:00 p.m.	Christmas holidays end
January 12, Tuesday	Reading day
January 13, Wednesday to January 21, Thursday	Semester examinations
January 22, Friday	First semester ends

SECOND SEMESTER

January 25, Monday, 8:00 a.m.	Registration
January 26, Tuesday	Classes begin
March 20, Saturday	Corps Day
April 7, Wednesday noon	Easter holidays begin
April 13, Tuesday, 6:00 p.m.	Easter holidays end
May 18, Tuesday	Reading day
May 19, Wednesday to May 26, Wednesday	Semester examinations
May 29, Saturday	Commencement

SUMMER SCHOOL

June 14, Monday, 8:00 a.m.	First session begins
July 23, Friday	First session ends
July 26, Monday, 8:00 a.m.	Second session begins
August 27, Friday	Second session ends

THE PURPOSE OF MILITARY TRAINING AT THE CITADEL

The Citadel is a liberal arts military college. While the college is justly proud of the war records of its sons and will always expect them to respond in national emergencies, its chief purpose is to prepare men for civil pursuits by giving them a sound education reinforced by the best features of military training.

Military training teaches the value of a methodical and orderly approach to tasks, of physical and mental fitness, and of alertness and self-confidence. It teaches how to achieve and maintain morale and discipline. Most important of all, it instills the conviction that sacrifice is preferable to compromise with principle, and that truth, honor, and integrity are the bases of character.

The effectiveness of academic education is enhanced by the concurrent development of military excellence. Citadel graduates in many vocations throughout the world attest the value of the rigorous regimen of the classroom, barracks and drill field.

Many desirable characteristics emanate from sources other than scholarship. College men are sometimes more profoundly influenced by tradition than by scholarly lectures. For this reason, The Citadel adds the code of the cadet to its academic training. The symbol of this code is the proudly-worn uniform, a constant reminder that alma mater expects of every son not only the knowledge and culture of a scholar, the public spirit of an enlightened citizen, and the honor and integrity of a gentleman, but also the courage and prideful bearing of a military leader.

ORGANIZATION

BOARD OF VISITORS

Colonel John M. J. Holliday, Chairman, '36 (1974) .....
Galivants Ferry, S. C. 29544

Colonel Eugene C. Figg, Vice Chairman, '28 (1976) .....
Charleston, S. C. 29401 (24 Savage St.)

Colonel Thomas C. Vandiver, '29 (1971) .... Greenville, S. C. 29602
(P. O. Box 1329)

Colonel Charles A. Laffitte, '29 (1972) ..... Allendale, S. C. 29810

General E. A. Pollock, USMC, Ret., '21 (1974)....Beaufort, S. C. 29902
(P. O. Box 861)

Brig. General Larkin H. Jennings, Jr. '33 (1975) .... Union, S. C. 29379
(P. O. Box 665)

Colonel C. Tucker Weston, Jr., '39 (1971) .... Columbia, S. C. 29206
(1548 Kathwood Rd.)

Colonel Robert A. Daniel, '50 (1971) ..... Charleston, S. C. 29402
(P. O. Drawer 670)

Colonel William F. Prioleau, Jr., '47 (1976) ..... Columbia, S. C. 29201
(Suite 103-4, Barringer Bldg.)

Colonel Samuel A. Wideman, '29 (1975) ..... Johns Island, S. C. 29455
(Rt. 3, Box 337A)

Ex-Officio

His Excellency Robert E. McNair, Governor ..... Columbia, S. C.

Major General Frank D. Pinckney, Adjutant General .... Columbia, S. C.

The Honorable Cyril Busbee, State Superintendent
of Education ..... Columbia, S. C.

The Honorable James P. Stevens, Chairman, Military
Committee, State Senate ..... Loris, S. C. 29569

The Honorable Robert W. Turner, Chairman, Military Committee
House of Representatives ..... North Charleston, S. C. 29406
(501 Parkside Dr.)

Colonel S. M. Sanders, USAR, Secretary, '20 .... Charleston, S. C. 29403
(Room 409, The Center)

General Hugh Pate Harris, USA, Ret ..... *President*
General Mark Wayne Clark, USA, Ret. ..... *President Emeritus*
Major General James W. Duckett ..... *Vice President and Dean of the College*
Brigadier General Wallace E. Anderson ..... *Academic Dean*
Colonel David S. McAlister ..... *Cadet Affairs Dean*
Colonel James M. Whitmire, Jr., USAF ..... *Commandant of Cadets*
Colonel J. F. Bosch, Jr. ..... *Comptroller*
Colonel D. D. Nicholson, Jr. ..... *Director of College Relations and Development*
Colonel George E. Reves ..... *Director of Evening Program*
Colonel D. Oliver Bowman ..... *Director of M.A.T. Program*
Commander Robert B. Folsom, USNR, Ret. ..... *Registrar and Director of Admissions*
Colonel J. M. Hillard ..... *Librarian*
Colonel Roy D. McCarty, USA, Ret. ..... *Staff Engineer*
Colonel James R. Woods, USA, Ret. ..... *Executive Assistant to the President*
Colonel Alvar B. Sundin, USA, Ret. ..... *Director of Personnel and Administration*
Colonel Edward L. Teague, Jr. .... *Director of Intercollegiate Athletics*
Colonel Sidney R. Crumpton, USA, Ret. ..... *Chaplain*
Drs. George McF. Mood, Jr. and Earl K. Wallace ..... *Surgeons*
Lt. Colonel Hugo A. Pearce ..... *Alumni Secretary and Director of Placement*

Administrative Staff Assistants

Colonel Burton F. Hood, Jr., USA ..... *Deputy Commandant*
Colonel Ralph D. Crosby, USA, Ret. ..... *Assistant Commandant*
Colonel John E. Burrows, USA, Ret ..... *Assistant to the Cadet Affairs Dean*
Colonel Chalmers H. Armstrong, Jr., USA, Ret. .... *Assistant Registrar*
Colonel Robert E. Cullis, USA, Ret. ..... *Assistant Commandant*
Lt. Colonel T. N. Courvoisie, USA, Ret. ..... *Property Officer*
Lt. Colonel John B. Amaker, USA, Ret. ..... *Postmaster*
Commander W. Q. Damon ..... *Purchasing Officer*
Major George L. Crumley ..... *Director of Computer Center*
Major Harvey F. Brand ..... *Canteen Manager*
Major John H. Holliday, USMC, Ret. ..... *Provost Marshal*
Major Eugene K. Smoak ..... *Assistant Comptroller*
Major Bailey M. Morrow, USA, Ret. ..... *Assistant Comptroller*
Captain Earl R. Mays ..... *Band Director*
Captain Vance E. Hightower ..... *Financial Aid Officer and Director Veteran Affairs*
Captain Richard R. Clarke ..... *Assistant Director of Public Relations*
Captain A. V. Hogan ..... *Secretary, Brigadier Club*
Captain T. A. Grogg ..... *Director of Archives and Museum*
First Lieutenant William B. Hallman ..... *Sports Publicity Director*
Mr. E. B. Coleman ..... *Director of Food Services*
Mr. Vernon W. Weston ..... *Director of Music*
The Reverend F. J. Hopwood ..... *Roman Catholic Chaplain*
Miss Susan Burk ..... *Administrative Assistant to the President*
Mrs. A. E. Dufour ..... *Cadet Hostess*
Mrs. Louise Wallace, RN ..... *Head Nurse*

FACULTY

General Hugh Pate Harris, USA, Retired
B.S., United States Military Academy; LL.D., Clemson University.
President

General Mark Wayne Clark, USA, Retired
B. S., United States Military Academy; Dr. Pol. Science, Universities of Naples and Vienna; D.C.L., Oxford; D.Sc., University of Florence; LL.D., Oberlin College, Pennsylvania Military College, Universities of Southern California, San Francisco, South Carolina, Akron, and Loyola; Litt.D., Clemson University
President Emeritus

Major General James William Duckett
B.S., The Citadel; M.S., University of Georgia; Ph.D., University of North Carolina
Vice President

Brigadier General Wallace Ervin Anderson
B.S., The Citadel; M.S., University of Kenutcky; Ph.D., University of Michigan
Academic Dean

Colonel Robert Waller Achurch
A.B., College of Charleston; M.A., Ph.D., University of North Carolina
Professor and Head, Department of English

Captain Dwight Adams
B.S.E., Henderson State Teachers College
Assistant Professor of Physical Education

Major Melvin M. Adams, USA
B.S., South Carolina State College
Assistant Professor of Military Science

Colonel Robert Spencer Adden
B.S., The Citadel; M.B.A., University of Pennsylvania; Ph.D., University of North Carolina
Professor and Head, Department of Business Administration

Major Larry Holbrook Addington
A.B., M.A., University of North Carolina; Ph.D., Duke University
Associate Professor of History

*Captain Bruce Winslow Aldrich
B.A., University of the South; M.A., University of South Dakota
Assistant Professor of Modern Languages

---

* On leave of absence

Major Harold Brice Alexander
B.A., The Citadel; M.A., Duke University
Associate Professor of English

Colonel Charles Leroy Anger
B.S., M.S., Ph.D., University of Virginia
Professor and Head, Department of History

Colonel Salvatore Alfred Arcilesi
A.B., The Citadel; Ph.D., University of Virginia
Professor and Head, Department of Political Science

*Captain Franklin Bascom Ashley
B.A., Newberry College; M.A., University of South Carolina
Assistant Professor of English

Lieutenant Colonel Benjamin H. Bailey, Jr.
B.A., The Citadel
Assistant Professor of Aerospace Studies

Major Jep Harmon Bailey
B.S., The Citadel; M.A., Duke University
Assistant Professor of Physics

Captain Tod Atkins Baker
B. A. University of Alabama; M.A., Ph.D., University of Tennessee
Assistant Professor of Political Science

Major Robert Edward Baldwin
B.S., The Citadel; M.S., Ph.D., University of South Carolina
Associate Professor of Biology

Lieutenant Colonel Alva Ray Ballentine
B.S., M.S., Ph.D., University of South Carolina
Professor of Chemistry

Lieutenant Colonel Lucius Beebe, USAF, Retired
B.A., M.A., Ph.D., University of Maryland
Assistant Professor of Political Science

Lieutenant Colonel Roger Stillman Bender
B.S., Yale University; Ph.D., Harvard University
Professor of Physics

*Captain Paul Revere Benson, Jr.
B.S., Purdue University; M.A., Ph.D., Indiana University
Assistant Professor of Political Science

Captain David Fiedig Lamont Bernthal
B.S., M.B.A., University of South Carolina
Assistant Professor of Business Administration

---

* On leave of absence

Colonel Earl John Berryhill, USAF, Retired
B.S., Texas Agricultural and Mechanical College; M.A., University of the Philippines; Ed.D., University of Houston
Assistant Professor of Education

Colonel Daniel Oliver Bowman
B.S., Furman University; M.Ed.. University of South Carolina; Ph.D., University of Georgia
Professor of Psychology and Director of Graduate Studies

Captain Thomas Clark Bowman
B.A., Marietta College; M.A., Ohio University
Assistant Professor of Biology

Captain John Robert Braun
A.B., Wheaton College; M.Ed., Ed.D., University of Georgia
Assistant Professor of Chemistry

Lieutenant Malcolm Michael Brennan, USNR
B.S., Georgetown University; M.A., Catholic University; Ph.D., University of South Carolina
Associate Professor of English

Captain John L. Brittain
B.A., M.A., University of Alabama
Assistant Professor of History

Major Chaford Acquilla Brown
B.S., M.S., University of South Carolina
Associate Professor of Mathematics

Captain Robert Lawrence Brown, Jr.
B.S., M.A., University of Alabama
Assistant Professor of Business Administration

Captain Roland Pryor Brown, USA
B.S., University of Alabama
Assistant Professor of Military Science

Captain Robert Samuel Brown
B.A., M.A., University of Alabama
Assistant Professor of Modern Languages

Captain James Albert Browning
B.S., M.S., University of Georgia
Assistant Professor of Chemistry

Lieutenant Colonel Arthur Edward Buckley, USA, Retired
B.S., M.S., Ph.D., University of Alabama
Assistant Professor of Business Administration

Major Donald Cleveland Bunch
B.S., The Citadel; M.S., Georgia Institute of Technology
Associate Professor of Business Administration

*Captain James Cozby Byrd, Jr.
B.S., University of South Carolina; M.A., Emory University
Assistant Professor of Physics

Captain Francis Xavier Byrne
B.S., Loyola College; M.S., Trinity University
Assistant Professor of Physics

Captain Richard Glenn Campbell
B.A., Furman University; M.A., University of Tennessee
Assistant Professor of Physical Education

Lieutenant Colonel Hazen Clair Carpenter, USAF, Retired
B.A., University of Wisconsin; M.A., Stanford University; Ph.D., University of Wisconsin
Professor of English

Lieutenant Colonel James Berry Carpenter, Jr.
A.B., Southwestern at Memphis; M.A., Vanderbilt University
Associate Professor of English

First Lieutenant Charles Benjamin Chance, Jr.
B.A., University of Richmond
Instructor of English

Colonel Raymond Maurice Clock, USA, Retired
B.S., United States Military Academy; M.S. in C.E., California Institute of Technology; M.B.A., George Washington University; Ph.D., University of Florida; P.E. (Kentucky, South Carolina)
Assistant Professor of Civil Engineering

Captain Charles F. Coates, USA
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Assistant Professor of Military Science

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Associate Professor, Catalogue Librarian

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* On leave of absence

*Commander John Stanford Coussons, USNR
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Assistant Professor of History

Captain Leslie Harrison Crabtree
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Major Emory S. Crosby
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Associate Professor of Biology

Major George Leon Crumley
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Associate Professor of Mathematics and Computer Science, and Director of Computer Center

Colonel Joseph William Dellastatious
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Professor and Head, Department of Physical Education

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Associate Professor of Chemistry

Captain Melvin H. Ezell, Jr.
B.S., East Carolina University; M.S., Ed.D., The University of Tennessee
Assistant Professor of Physical Education

Major Frank Lynn Feigl
B.S., Indiana University; M.A., Ball State Teachers College
Associate Professor of Physical Education

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* On leave of absence

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Assistant Professor of Physical Education

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Captain Thomas Alva Grogg
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Assistant Professor, Museum Director and Archivist

Captain Joseph Francis Gundel
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Captain Keith Edward Hamilton
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Assistant Professor of Aerospace Studies

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Professor, Head Librarian

Colonel Loring Kenneth Himelright
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Professor and Head, Department of Civil Engineering

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Colonel Charles Edward Hirshey
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Professor and Head, Department of Education

Colonel Wiley Edward Hodges
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Professor of Political Science

Major Woodrow Lee Holbein
B.A., Baldwin Wallace College; M.A., Western Reserve University
Associate Professor of English

*Captain Herschel Curlee Hudson
B.S., M.A., University of South Carolina
Assistant Professor of Sociology and Anthropology

---

* On leave of absence

Captain Stacy Lloyd Hull
B.A., M.S., State University of Iowa
Assistant Professor of Mathematics

Lieutenant Colonel William Strong Hummers, Jr.
B.S., Washington and Lee University; Ph.D., University of North Carolina
Professor of Chemistry

Colonel Lee Pressley Hutchison
B.S., Grove City College; M.A., Ph.D., University of Kentucky
Professor of Mathematics

Lieutenant Colonel Gus Jacob Hutto
B.S., C.E., The Citadel; P.E. (South Carolina)
Associate Professor of Civil Engineering

Major Marvin Leslie Infinger
A.B., Wofford College; B.D., Garret Biblical Institute; M.A., Northwestern University
Associate Professor of Business Administration

Captain Jackson Reid Ingraham
A.B., Atlantic Christian College; M.A., East Carolina University
Assistant Professor of Mathematics

Captain Walter Byron Jay
B.A., Mississippi State College; M.Ed., University of Georgia
Assistant Professor of Education

Captain Douglas Barr John
B.A., M.A., University of Louisville; Ph.D., University of Kentucky
Assistant Professor of History

Lieutenant Colonel Benjamin Richard Johnson
A.B., M.A., Indiana University
Associate Professor of Physics

Lieutenant Colonel David Donovan Johnson
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Professor of Modern Languages

Major Austin Bryant Johnson, USAF
B.S., The Citadel
Assistant Professor of Aerospace Studies

Lieutenant Colonel Luther Elman Johnson, USA, Retired
B.S., M.S. in E.E., Texas Agricultural and Mechanical College
Associate Professor of Electrical Engineering

Lieutenant Colonel Charles Frederick Jumper
B.S., M.S., University of South Carolina; Ph.D., Florida State University
Professor of Chemistry

Captain Bernard McLain Joseph Kelley, Jr.
B.S., Davidson College; M.S., Ph.D., Emory University
Assistant Professor of Biology

Captain Paul James Kingston
B.S., Hillyer College; M.A., University of Connecticut
Assistant Professor of Political Science

Lieutenant Charles Denver Kirkland, USNR
B.S. in Ed., Georgia Teachers College; M.A., University of Georgia
Assistant Professor of Mathematics

Commander Clarence Eugene Kuhlman, USNR, Retired
B.A., M.A., University of Texas; Ph.D., University of North Carolina
Associate Professor of Business Administration

Captain Jerry Vernon Lape, USA
B.S., United States Military Academy
Assistant Professor of Military Science

Captain William Dana Laws
B.S., B.A. in L.S., East Tennessee State College; M.A. in L.S., Georgia Peabody College
Assistant Professor, Documents and Serials Librarian

Lieutenant Colonel Enoch Lawrence Lee, Jr.
B.S., M.A., Ph.D., University of North Carolina
Professor of History

Captain Maurice John Lenhardt
A.B., Wabash College
Assistant Professor of Education

Commander Robert Summers Leopold, USN, Retired
B.S., Mississippi State College; M.A., University of North Carolina; Ph.D., University of Florida
Associate Professor of Chemistry

Captain Kenneth L. Loren
B.S., United States Military Academy
Assistant Professor of Aerospace Studies

Major Charles Lucas
A.B., Eastern Kentucky State Teachers College; M.A. in Education, University of Kentucky
Assistant Professor of Business Administration

Lieutenant Colonel Samuel Jesse McCoy
A.B., Wofford College; M.A., Duke University; Ph.D., University of North Carolina
Professor of English

Lieutenant Colonel David Archibald McDowell
A.B., Furman University; M.A., University of North Carolina; Ph.D., Vanderbilt University
Professor of English

Major James Herbert McIntyre
A.B. in Ed., M.A., University of North Carolina
Associate Professor of Mathematics

Captain Wallace Edgar McNew
B.S., University of Virginia; M.S., University of Georgia; Ph.D., Clemson University
Assistant Professor of Chemistry

Captain Norman MacLeod
B.A., M.A., University of North Carolina
Assistant Professor of English

Major Jimmy Magoulas
A.B., The Citadel; M.A., East Carolina University; Ed.D., University of Virginia
Associate Professor of Education

Captain John Joseph Mahoney
B.S., The Citadel; M.S., Georgia Institute of Technology
Assistant Professor of Business Administration

Captain William Clifton Malpass
B.S., Carson-Newman College; M.Ed., Furman University
Assistant Professor of Physical Education

Lieutenant Commander August John Marjenhoff, USNR
A.B., Duke University; M.B.A., University of North Carolina
Assistant Professor of Business Administration

Captain Thomas Lee Marshall
B.A., Southwestern at Memphis; M.A., Ph.D., University of Virginia
Assistant Professor of Political Science

Lieutenant Colonel Charles Clifton Martin, Jr.
B.S., M.A., Ph.D., University of North Carolina
Professor of History

Major Leon Raymond Masters
B.S. in Commerce, The Citadel; M.A., Duke University
Associate Professor of Business Administration

Captain Walter Bland Mathis, Jr.
A.B., The Citadel; M.A., Harvard University
Assistant Professor of English

Lieutenant Colonel Anthony Richard Mattos, USA, Retired
B.A., M.A., Stanford University
Assistant Professor of Modern Languages

Major Arthur L. Mavis, Jr.
B.S., United States Military Academy
Assistant Professor of Aerospace Studies

Captain James Edmund Maynard
A.B., Berry College; M.S., Louisana State University
Assistant Professor, Circulations Librarian

Captain James Lonnie Mayo, USAF
B.S., The Citadel
Assistant Professor of Aerospace Studies

Major Clinton Amos Medbery, Jr.
B.S., M.S., Texas Agricultural and Mechanical College
Associate Professor of Chemistry

Colonel John Abner Meeks, USA, Retired
B.S., United States Military Academy; M.S., Massachusetts Institute of Technology
Assistant Professor of Physics

Lieutenant Colonel Robert Edwin Mellard
B.S. in C.E., The Citadel; M.S., University of Tennessee; P.E. (South Carolina)
Professor of Civil Engineering

Lieutenant Colonel John Charles Mettler
A.B., Washburn College; M.A., Rutgers University; Ph.D., Clark University
Professor of Business Administration

Major Lewis Blake Middleton
B.S., Clemson University; R.A., (South Carolina and Mississippi)
Assistant Professor of Civil Engineering

*Captain Laurence Wayne Moreland
B.A., Southern Methodist University; M.A., Duke University
Assistant Professor of Political Science

Major Boyd Allison Morgan, USAF
B.S., Virginia Polytechnic Institute
Assistant Professor of Aerospace Studies

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* On leave of absence

Major John Allen Morris
A.B., College of Charleston; M.A., University of North Carolina
Associate Professor of English

Captain Jamie Wallace Moore
A.B., Denison University; M.A., University of Arkansas
Assistant Professor of History

Major Jimmy R. Moore, USA
B.A., The Citadel
Assistant Professor of Military Science

Captain Kenneth L. Muller, USA
B.S., The Citadel
Assistant Professor of Military Science

First Lieutenant Donald Alfred Murry, Jr.
B.S.E., Arkansas Agricultural and Mechanical College
Instructor of Physical Education

Lieutenant Colonel John Charles Myers
B.S., The Citadel; C.E., University of South Carolina; P.E. (South Carolina)
Professor of Civil Engineering

Captain Herbert Thomas Nath
B.S., Indiana State College in Pennsylvania; M.S. in L.S., Drexel Institute of Technology
Assistant Professor, Reference Librarian

Captain William Gary Nichols
A.B., M.A., University of Alabama
Assistant Professor of History

Captain R. Bryan Nichols
B.A., M.A., LL.B., Ph.D., Baylor University
Assistant Professor of English

Captain James Michael O'Neil
B.A., University of New Hampshire; M.A., New York University
Assistant Professor of English

Lieutenant Colonel Luke Theodore Pappas
B.S., Morris Harvey College; M.A., Louisiana State University; Certificado de Doctorado, Ph.D., University of Seville
Professor of Modern Languages

Captain Jimmy Dale Parker
B.S.E., Arkansas Agricultural and Mechanical College
Assistant Professor of Physical Education

Captain Richard H. Payne
A.B., M.A., University of Georgia
Assistant Professor of Political Science

Captain Hugh Owens Peurifoy
A.B., The Citadel; M.A., University of Denver
Assistant Professor of English

Lieutenant Colonel Edward Hamilton Phillips
B.A., University of Virginia; M.A., Ph.D., University of North Carolina
Professor of History

Major John Harmann Pieper, III, USAFR
B.A., The Citadel; M.A., Emory University
Assistant Professor of Modern Languages

Captain Chalmers Marshall Port
B.A., University of North Carolina; M.Ed., Pennsylvania State University
Assistant Professor of Physical Education

Captain Dennis Lee Rebber
B.S., The Citadel; M.B.A., University of South Carolina
Assistant Professor of Business Administration

*Captain Tony Neil Redd
B.A., Furman University; M.A., University of Virginia
Assistant Professor of English

*Captain James Aldrich Wyman Rembert
B.A., The Citadel; M.A., University of South Carolina; Ph.D. University of North Carolina
Assistant Professor of English

Colonel George Everett Reves
B.S., Millsaps College; M.A., Vanderbilt University; Ph.D., University of Cincinnati
Professor and Head, Department of Mathematics

Captain William Paterson Rhett, Jr.
B.S., College of Charleston; B.D., Virginia Theological Seminary M.Ed., Temple University
Assistant Professor of Education

Captain John Allen Riley
A.B., M.A., University of South Carolina; Ph.D., University o Georgia
Assistant Professor of English

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* On leave of absence

Captain Leslie Gregory Robinson
B.S., North Carolina State University; M.A., Western Carolina University
Assistant Professor of Physical Education

Captain Robert Nesbitt Robinson
B.A., University of the South; B.Th., University of Toronto; Certificate of Theology, Manchester College, Oxford
Assistant Professor of Philosophy

Captain Bobby Sullivan Roper
B.S.E., University of Arkansas
Assistant Professor of Physical Education

Captain Emery Roughton, USN, Retired
B.S., United States Naval Academy; M.A.T., Duke University
Assistant Professor of Mathematics

Major Gerald Luther Runey
B.S., College of Charleston; M.S., Ph.D., University of South Carolina
Associate Professor of Biology

Captain Carey Rushing
B.S., Mississippi College; M.S., University of Florida; Ph.D., University of South Carolina
Assistant Professor of Chemistry

Captain Jasper Lyles Rutland
B.S. in C.E., The Citadel; P.E. (South Carolina)
Assistant Professor of Civil Engineering

Colonel James Franklin Scoggin, Jr., USA, Retired
B.S., Mississippi State University; B.S., United States Military Academy; M.S., Johns Hopkins University; Ph.D., University of Virginia
Associate Professor of Electrical Engineering

Captain Frank Seabury
A.B., M.A., University of Miami
Assistant Professor of Biology

Captain Roger Allan Sizemore
B.A., Milligan College; B.D., Butler University; Ph.D., University of Edinburgh
Assistant Professor of Psychology

Lieutenant Colonel Harrison Stewart Smith, USA, Retired
B.S. in C.E., The Citadel; M.E., Texas Agricultural and Mechanical College; P.E. (Vermont)
Assistant Professor of Civil Engineering

Colonel Henry D. G. Smith
A.B., Johns Hopkins University; A.M. Ph.D., Harvard University
Professor and Head, Department of Modern Languages

Major Robert Lewis Smith
B.A., Centre College; M.A., University of Wisconsin
Associate Professor of Modern Languages

Captain John Philip Smyth
B.S., M.S., Indiana State University
Assistant Professor of Physical Education

Lieutenant Colonel Thomas J. Stacy, USA, Retired
B.A., San Diego State College; M.A., Teachers College, Columbia University
Assistant Professor of Modern Languages

Captain Robert Preston Steed
B.A., University of Alabama; M.A., Ph.D., University of Virginia
Assistant Professor of Political Science

Captain Harold M. Steelman
B.S.E., M.A., University of Arkansas
Assistant Professor of Physical Education

Captain John G. Stewart
B.S., Eastern Kentucky State College; M.A., Eastern Kentucky University
Assistant Professor of Physical Education

Major Philip Brent Stockton
A.B., Stanford University; M.B.A., Harvard Business School
Associate Professor of Business Administration

Captain Douglas Eugene Styles
B.S., M.A., Appalachian State University
Assistant Professor of Physical Education

Lieutenant Colonel Charles Samuel Sutton
B.S., M.S., Massachusetts Institute of Technology
Professor of Mathematics

Colonel Edward Lindell Teague, Jr.
A.B., M.A., University of North Carolina
Associate Professor of Physical Education

Major Russell Emery Thompson
B.S.,University of New Hampshire; Ed.M., Tufts College; M.A., University of South Carolina
Associate Professor of Mathematics

Colonel Frank Cambridge Tibbetts
B.S., Southwestern Missouri State Teachers College; M.B.A., Northwestern University
Professor of Business Administration

Major Richard L. Tillman
B.S., United States Naval Academy
Assistant Professor of Aerospace Studies

Colonel James Anderson Timmerman, Jr.
B.S., M.S., Clemson College; Ph.D., Auburn University
Professor and Head, Department of Biology

Captain William Thomas Trotter
B.S., The Citadel; M.A., Ph.D., University of Alabama
Assistant Professor of Mathematics

Lieutenant Colonel Francis Eugene Voegeli, USA, Retired
B.S. in Business Administration, University of Wichita; B.S., United States Military Academy; M.S. in E.E., Georgia Institute of Technology
Assistant Professor of Physics

Captain George Frederick Von Kolnitz IV
B.S. in C.E., The Citadel; M.S., Georgia Institute of Technology
Assistant Professor of Civil Engineering

Captain Henry Dickerson Wagener
B.A., Washington and Lee University; M.S., University of North Carolina
Assistant Professor of Chemistry and Geology

Captain Louis Charles Walsh, USAF
B.A., The Citadel
Assistant Professor of Aerospace Studies

Captain Andrew Bowie Wardlaw
A.B., The Citadel; M.S., Georgetown University
Assistant Professor of Political Science

Lieutenant Colonel VanCleave Parrott Warren, USA, Retired
B.A.. The Citadel; B.S., United States Military Academy; M.A., Middlebury College
Assistant Professor of Modern Languages

Lieutenant Colonel Louis Weile, USAR
B.A., The Citadel; M.A., University of Pennsylvania
Associate Professor of English

Mr. Vernon Wylie Weston
A.B., Furman University
Instructor of Education

Colonel James Martin Whitmire, Jr., USAF
B.S., The Citadel
Professor and Head, Department of Aerospace Studies

Major Howard Parker Whitney
B.S. in Ed.; M.Ed., Boston University
Assistant Professor of English

Major James Robert Whitney
B.S., The Citadel; M.B.A., University of North Carolina; C.P.A.
Associate Professor of Business Administration

Colonel Joseph Ridley Wilkinson
B.S., The Citadel; M.S., University of Georgia; Ph.D., Florida State University
Professor and Head, Department of Chemistry

Major Augustus Thomas Wilson
B.S., New York University; M.S., University of Minnesota
Associate Professor of Business Administration

Captain Gerald Robert Wilson, Jr.
B.A., The Citadel
Assistant Professor of Military Science

First Lieutenant Roy Don Wilson
B.S., Texas Agricultural and Mechanical College
Instructor of Physical Education

Captain Diedrich Christian Heinrich Witt, Jr.
B.S., Newberry College
Assistant Professor of Physical Education

*Captain John Harvey Wittschen, Jr.
B.S., Presbyterian College; M.B.A., University of South Carolina
Assistant Professor of Business Administration

Commander James Isaac Young, USNR
B.S., The Citadel; M.B.A., University of Pennsylvania; C.P.A.
Professor of Business Administration

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* On leave of absence

EMERITI FACULTY

James Douglas Blanding, Ed., D., *Professor of Education*

Ernest Irvin Blevins, *Assistant Professor of Modern Languages*

George S. Boase, M.S., *Associate Professor of Chemistry*

Robert F. Brand, Ph.D., *Associate Professor of Modern Languages*

Ralph Milledge Byrd, Ph.D., *Academic Dean*

James Karl Coleman, Ph.D., *Professor of Political Science*

Thomas Finley Debnam, M.S., *Associate Professor of Business Administration*

Leaman Andrew Dye, Ph.D., *Professor of Mathematics*

James Geraty Harrison, Ph.D., *Professor of English*

John Clementson Key, B.S.C.E., *Assistant Professor of Civil Engineering*

Louis Shepherd LeTellier, M.S., *Professor of Civil Engineering*

Marion Smith Lewis, M.A., *Professor of Business Administration*

Carl Francis Myers, Jr., M.A., *Associate Professor of Mathematics*

John Alvah Lee Saunders, M.A., *Associate Professor of Mathematics*

Nelson Van de Luyster, Ph.D., *Professor of Modern Languages*

Francis Sidney Walls, M.A., *Assistant Professor of Modern Languages*

Samuel Adam Wideman, Ph.D., *Professor of Chemistry*

Smith Johns Williams, M.A., *Professor of History*

Elmer Benjamin Wixom, M.S., *Assistant Professor of Chemistry*

HISTORY OF THE CITADEL

The Old Location and the New

The history of The Citadel may be divided into two parts. In the first, extending from December 20, 1842, when the legislature of South Carolina passed an act providing for the establishment of the college, to September, 1922, the institution was located on Marion Square. This open space of about ten acres has long been the middle of historic Charleston. In the second, extending from 1922 to the present, The Citadel has been situated about two miles northwest of its former location on a beautiful campus of about one hundred acres between Hampton Park and the Ashley River.

The Origin of the Name

The Citadel derived its name from the building in which it was first housed. Erected with state funds as an arsenal some years after the frustration of the Denmark Vesey slave uprising of 1822, this sturdy old fortress, which still dominates Marion Square, was called The Citadel. It was garrisoned first by Federal, then by state troops until they were replaced in March, 1843, by the twenty students who comprised the first Corps of Cadets. These cadets served as guards for the state's arms and pursued a course of study designed to make them useful citizens in time of peace as well as war.

With its sister school, The Arsenal, established at the same time in Columbia, the state capital, The Citadel was a part of what came to be known as the South Carolina Military Academy. In 1845 regulations governing the institution subordinated The Arsenal to The Citadel and thereafter The Arsenal trained only freshmen. The Arsenal burned in 1865 and was never reopened.

The first period of the college's existence on Marion Square lasted until 1865. During this period high standards of intellectual accomplishment and military discipline were maintained, and enrollment was increased to 145 cadets by January 1, 1864.

The Citadel in the Civil War

The founders—men like Governor J. P. Richardson and J. H. Hammond and General D. F. Jamison, who was later to preside over the convention at which the South Carolina Ordinance of Secession was signed—had foreseen that the state might soon need men with military training. When the trouble long brewing between the North and the South erupted in war, the record of Citadel alumni and cadets vindicated the foresight of the founders. Of the 224 alumni living at the time of the Civil War, 193 wore the Confederate grey, all but twenty as commissioned officers and four as generals. Thirty-nine were killed in battle, and four died in the service. On January 9, 1861 —before the firing on Fort Sumter—cadets of the Corps manned the guns which drove back from the entrance of Charleston harbor the *Star of the West,* a steamer sent by the Federal government to relieve

the fort. Made a part of the military organization of the state by legislative act of January 28, 1861, the Corps of Cadets helped emplace and guard artillery on James Island, did guard duty in Charleston, and on December 6-9, 1864, near the war's end, suffered several casualties in an engagement with Union troops at Tulifinny Creek near Yemassee Station, while helping to defend the Charleston and Savannah Railroad.

Very shortly afterwards came years of eclipse for The Citadel. From February 18, 1865, when a Union force marched into Charleston, until April, 1879, the buildings on Marion Square were occupied by Federal troops, and the operation of the college was necessarily suspended.

The Reopening after the Civil War

The second period of The Citadel's existence on Marion Square began on October 2, 1882, with an enrollment of 185 cadets. Though the Corps no longer served as arsenal guard, the military system of the antebellum years was in all other respects continued. The reopening of the college was the culmination of efforts begun by alumni in April, 1877. At their request Governor Wade Hampton appointed a Board of Visitors in 1878, and in January, 1882, the state legislature passed a bill providing for the re-establishment of the college and appropriating money for the repair of its buildings and for its maintenance.

In the forty years that passed before The Citadel moved to its present site, the physical plant was enlarged, part of the cost being defrayed with money collected in 1888 from the Federal government for rent and for damages sustained during the years the buildings were occupied by Federal troops. The enrollment was increased, and the curriculum was made more flexible.

In 1910 the name of the college was changed to The Citadel, The Military College of South Carolina. In 1918, during the administration of Mayor T. T. Hyde, the City Council of Charleston offered the state the present site of the college—a tract of about eighty acres of high land and a hundred acres of salt marsh. Early in 1919, the State Legislature accepted the offer and appropriated money for the erection of the first buildings.

The Greater Citadel

In the fall of 1922 the college began operating at its new location. There were then only a few buildings on the campus. In the intervening years many have been added to those originally constructed (See Grounds and Buildings, page 32, for a complete description of the present campus), and enough salt marsh has been reclaimed to give the college a campus of more than one hundred acres.

Changes in the curriculum and in the nature of the student body have paralleled those in the physical plant. In the last year at the

old location it was possible for a student to major in only three fields during his junior year: chemistry, civil engineering, and physics. In his senior year the student was then able to major in these or biology-chemistry or English. Now students may choose from the following, all of which offer major work for at least the junior and senior years: biology, business administration, chemistry, civil engineering, education, electrical engineering, English, history, mathematics, modern languages, physical education, physics, and political science. Pre-medical students major in chemistry or biology.

The Student Body

There have been significant changes in the student body. One is that it has grown larger. In 1921-1922 there were fewer than 300 cadets in the Corps. In 1947-48, when the student body was the largest the college ever had, there were 2,271 students enrolled including cadets and veterans. Nearly 3,500 veterans of World War II and the Korean Conflict, most of whom were civilian students, attended the college under Public Law 396, popularly known as the G. I. Bill. The program for veterans ended in September, 1960, but was resumed in 1967. Some 150 veteran students now attend The Citadel in addition to the 2,000 members of the Corps of Cadets. Since 1950 women have been admitted as students, although only to summer sessions, the Evening Program which was originated in 1966, and the Graduate Program, begun in 1968.

The growth of the Corps is further reflected in the fact that, while there were 700 Citadel graduates and ex-cadets in the armed forces in World War I, there were about 6,000 alumni and ex-cadets on active service in World War II. Of these, 280 died for their country. Some 1,500 were on active duty during the Korean Conflict, 450 of whom were in combat and 26 of whom gave their lives. Virtually all graduates on active duty have been commissioned officers. Many are currently serving in Vietnam where more than forty have made the supreme sacrifice.

Memorials to the Makers

Persons prominent in the history of The Citadel are memorialized in campus structures. For example, the largest barracks is named for Colonel James Padgett, member of the Board of Visitors for many years, and Colonel J. P. Thomas, its longtime chairman. The other barracks are named for Andrew B. Murray, philanthropist whose generosity made possible the construction of a barracks and the hospital; Major General Evander M. Law, C.S.A., Citadel 1856, educator; and Major P. F. Stevens, Citadel 1849, superintendent from 1859 to 1861. The dining hall is named for Colonel Asbury Coward, Citadel 1854, superintendent from 1890 to 1908; the liberal arts classroom building for Brigadier General Ellison Capers, C.S.A., Citadel 1857, Episcopal Bishop of South Carolina and chancellor of the University of the South, Sewanee, and his brother, Major F. W. Capers,

superintendent from 1852 to 1859; the military science building for Brigadier General Micah Jenkins, C.S.A., Citadel 1854, founder of King's Mountain Military School; the physical education building for Hugh S. Thompson, Citadel 1856, twice Governor of South Carolina 1882-1884, Assistant Secretary of the U. S. Treasury 1886, and commissioner of the U. S. Civil Service 1890; the stadium, acquired by the college in 1963 and seating 22,500 spectators, for Brigadier General Johnson Hagood, C.S.A., first honor graduate, Class of 1847, Governor of South Carolina, 1880-1882, and chairman of the Board of Visitors at the time the college was re-established after the Civil War; LeTellier Hall, for Colonel L. S. LeTellier, for many years head of the Department of Civil Engineering and later acting president of the college; the largest academic building, for Colonel O. J. Bond, president from 1908 to 1931; the chapel, for General Charles P. Summerall, former Chief of Staff of the United States Army, Citadel president from 1931 to 1953; the student activities building for General Mark Wayne Clark, president emeritus of The Citadel, and the new Chemistry-Geology building for Colonel R. M. Byrd, Class of 1923, first academic dean of The Citadel.

Good Signs for the Future

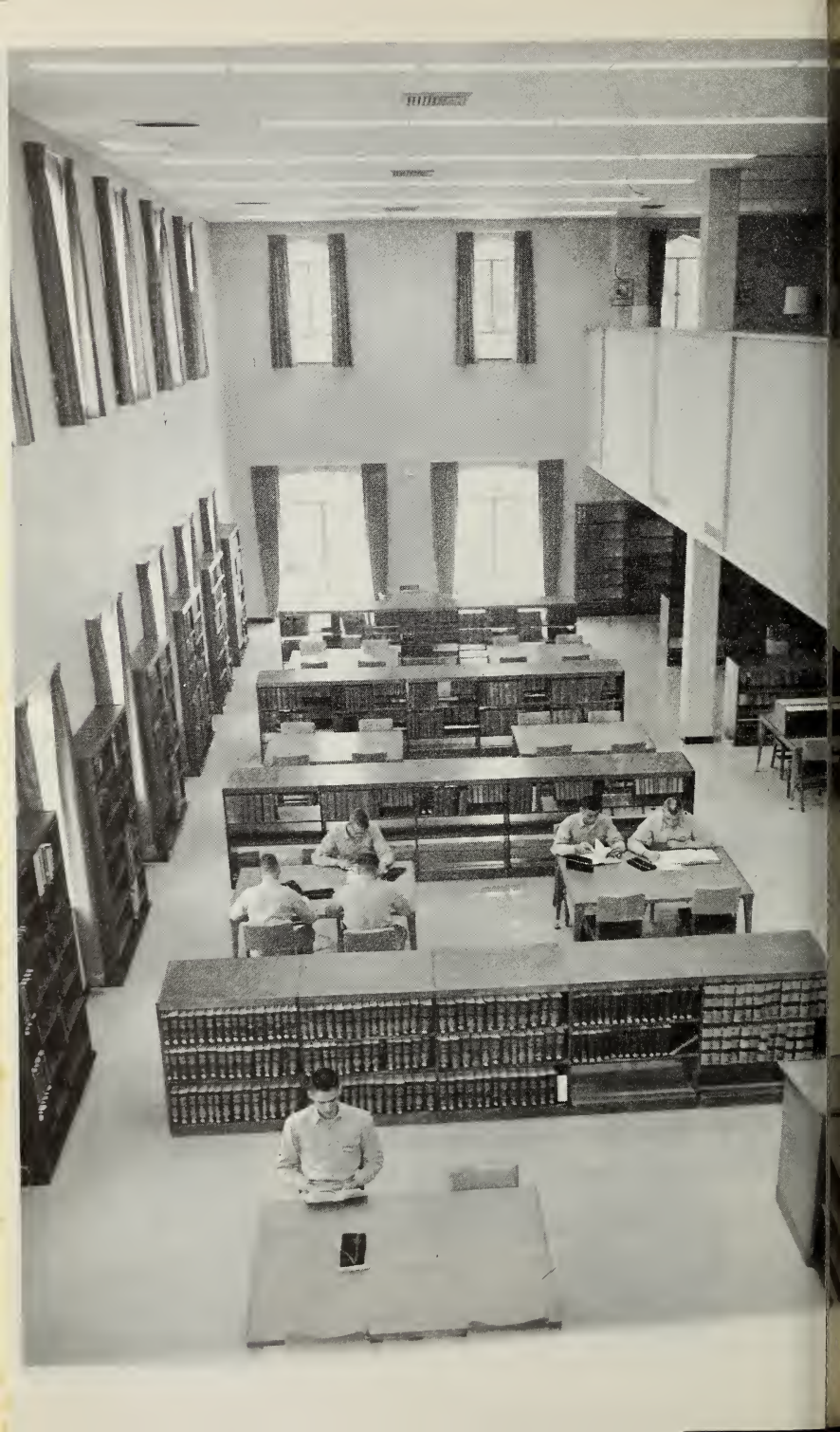
In recent years The Citadel has received several generous gifts. The first, public announcement of which was made on August 31, 1953, was the bequest by Joseph D. Aiken, of Charleston, South Carolina, of $750,000. Two other gifts, both made by United States Senator Charles E. Daniel, of Greenville, South Carolina, and his brother, Mr. R. Hugh Daniel, of Birmingham, Alabama, were the Thomas Dry Howie Memorial Carillon and the sum of $50,000 for scholarships. The scholarship gift was announced on October 9, 1954. On December 5, 1954, the Carillon was dedicated to the memory of Major Howie, of the Class of 1929, who died heroically in the fighting at St. Lo, France, on July 17, 1944. (See Grounds and Buildings, page 33 for description of the Carillon). The fourth gift, amounting to $200,000, was bequeathed to the college for scholarships by Major General Harry K. Pickett, U. S. Marine Corps (Retired), Class of 1911, who died March 19, 1965. A similar bequest of $200,000 was effected by General Pickett's widow who died June 12, 1968, and this fund is designated for faculty development. A fund of $120,000 to establish the W. Steve Weston, Jr., Class of 1938 Leadership Foundation, which Mr. Weston has instituted at The Citadel for cadet scholarships and faculty grants, is the college's most recently-acquired major gift.

General Clark, a distinguished soldier who followed General Summerall as president, commanded the U. S. Fifth Army in Italy and the United Nations forces in Korea, and was president of The Citadel from March 19, 1954 to June 30, 1965. Under his leadership the enrollment steadily increased until the maximum barracks capacity of

2,000 cadets was reached in 1957. Since then enrollment has remained at 2,000. Admission requirements and academic standards continually improved under a program of selectivity.

Succeeding General Clark was General Hugh Pate Harris, who became The Citadel's twelfth president on July 1, 1965. The third, four-star retired Army general to be president of The Citadel, General Harris served in many significant combat, administrative, and educational positions while on active duty. The highly-decorated general's last assignment before coming to The Citadel was as Commanding General, U. S. Continental Army Command, with headquarters at Fort Monroe, Virginia.

THE CITADEL
JAMES ISLAND 1884
JAMES ISLAND
STAR OF THE WEST
TOUFINNY
WARPOD CUT



Location

The Citadel is located on a one-hundred-acre campus in the northwestern part of the city of Charleston. The view to the west and south across the Ashley River, which skirts the campus, is typical of the Carolina Low Country scenery. From the east, the campus is entered through Hampton Park, a show-place of flowers, trees, terraces, and sunken gardens.

Buildings

Architecturally, the buildings follow the Spanish-Moorish style of the original campus in the heart of the city. All major structures, such as barracks, academic and administrative buildings, chapel, armory, student activities building, and library-museum, border the large parade ground, which forms the center of the campus.

Bond Hall

Bond Hall, the main building on the campus, contains in the central part the administrative offices of the college, and the offices of the Association of Citadel Men. In the large wings are academic departments, laboratories, and classrooms of Biology, Physics, Electrical Engineering, Business Administration, and Education. The west wing has been demolished and is being reconstructed to provide new laboratories and classrooms, a greenhouse and an animal house for biological instruction.

Byrd Hall

This 50,000 square foot building, completed in late 1968, contains the most modern classrooms and laboratories for chemistry and geology instruction.

Capers Hall

Capers Hall is a classroom building housing the Departments of English, History, Mathemetics, Modern Languages, and Political Science.

LeTellier Hall

LeTellier Hall contains the Department of Civil Engineering with its classrooms, laboratories and library.

Jenkins Hall

This building contains offices of the Commandant, his staff, and the faculty of the Military and Aerospace Studies Departments who teach the Army and Air Force Reserve Officer Training Corps Programs. The building also contains storage areas for weapons and military supplies, a lecture room with a capacity of 250, and ten classrooms, each with a capacity of forty-five. Also included is the Board of Visitors room.

The Armory

The Armory is used for indoor drills, athletic contests, dances, and other activities and functions at which large crowds are assembled. The main area has a floor surface of thirty thousand square feet,

and a ceiling clearance of sixty-five feet. The steel balconies will seat approximately 2,400 spectators.

An annex at the rear of the Armory contains the swimming pool, with pressure filters and sterilizing and heating apparatus to assure cleanliness and to provide year-round use.

The Chapel and Carillon

The General Charles Pelot Summerall Chapel, on the east side of the campus, faces the row of barracks which forms the western boundary of the parade ground. The cathedral-like proportions of the Chapel with its fine pipe organ and splendid memorial windows of stained glass create an atmosphere of religious piety befitting its purpose.

To the north of the Chapel is the Major Tom Howie Carillon, a gift of two Citadel alumni, the late Senator Charles E. Daniel and his brother, Mr. R. Hugh Daniel, in memory of the famous "Major of St. Lo," a classmate of the donors.

Barracks

The four dormitories, or barracks, of brick and concrete construction, are rectangular with paved interior courts enclosed by galleries. Rooms accommodate two or more cadets.

Coward Hall

Conveniently located behind the barracks is the cadet dining hall, with a seating capacity of two thousand. Constructed of concrete and tile, this building is fully equipped with modern facilities for storing, preparing, and serving food. Dining-room floors are terrazzo, the kitchen floors are of quarry tile, and all wainscots of glazed brick, so that sanitation is easily maintained. New and up-to-date equipment is installed in the kitchen and the three dining rooms are air conditioned.

The Mary Bennett Murray Hospital

The college infirmary conforms with the most modern standards of equipment and personnel. The college surgeon is aided by a head nurse and her assistants.

Alumni Hall

This building is used for sports and recreational activities. On the ground floor are athletic lockers, showers, and equipment rooms. There is a gymnasium on the second floor.

Thompson Hall

This building contains the Physical Education Offices and classrooms as well as a drafting room and two classrooms of the Civil Engineering Department. It also has the band and bagpipers facilities, athletic dressing rooms and housing for visiting varsity teams.

Mark Clark Hall

This is the student activities building. On the first floor is a large central lobby, on one side of which is a well-appointed reception room

and on the other side and rear, a post office, canteen, barber shop, billiard room, and bowling room of six alleys. On the second floor an auditorium with a seating capacity of one thousand can be used for dances and other large gatherings. The cadet store, television room, game rooms, large club room with kitchen facilities, and offices of the Dean of Cadet Affairs are also on the second floor. On the third floor are a court room for the Cadet Honor Committee, three conference rooms, a dark room for camera hobbyists, and editorial rooms for campus publications. Apartments for distinguished guests of The Citadel are also on this floor.

Memorial Library

The Citadel Memorial Library commemorates Citadel men of all wars who gave their lives for their country. This building combines the best features of efficient and aesthetic library planning. It provides an excellent location for the student not only to study for his classroom work, but also to familiarize himself with the literature which will give him an appreciation of reading as a part of his cultural heritage.

Every effort has been taken to make this building not only an educational bulwark but a place of inspiration as well. This inspirational program includes eight murals depicting the history of The Citadel and epitomizes the part that The Citadel and her sons have played in the life of the state and the nation. There is also a President's Room which features portraits of the superintendents and presidents of The Citadel. The Gallery of Distinguished Alumni honors those alumni who have made outstanding contributions to mankind. The Rare Book Room combines elegance and practical planning to provide safe housing for valuable items in a place of beauty. In this room are books dealing with The Citadel and its history.

The main collection of over 100,000 books, bound periodicals, documents, and pamphlets is easily accessible to all students in the open-stock arrangement. These supplement the books in the Reference Room and provide an excellent means for the student to enhance his education. Each year more than 6,000 volumes are added to this already excellent collection.

The library subscribes to more than 675 current periodicals and to newspapers from the principal cities of South Carolina and the nation. Most of this valuable research material is preserved for future use by either microfilming or binding. The library has the latest equipment for the reading of all types of microprint publications.

Supplementing the books in the main library are collections of technical books in departmental libraries located in the Chemistry and Civil Engineering Departments. All books on the campus are catalogued and included in the catalogue at the main library.

The building, exclusive of the lounge areas, will seat 450 students. Provision has been made for seminar and conference rooms for both

faculty and cadets. Built to shelve 250,000 volumes, this library will be adequate for many years and provides space for an excellent college collection.

The Mark Clark Archives of World War II

General Mark W. Clark's generous donation of his personal and military papers has made possible the establishment of a research center at The Citadel. The collection is invaluable as an original source of documents relating to World War II. It has received nation-wide attention from other archival institutions and historians.

Some 60,000 manuscripts, 40,000 photographs and many movie films, tape recordings, newspapers and newspaper clippings as well as artifacts are now included in the collection.

The purpose of the archives is to process, preserve, and catalogue the material so that it may be made available for research. It is housed in the Memorial Library adjacent to the museum area of that building.

Museum

The Citadel Memorial Military Museum, occupying the third floor of the Library-Museum building, provides a setting in which objects and articles related to the school's proud history can be preserved and displayed. The museum is adapted to a program of changing exhibits to supplement and support the academic program.

Included in the museum program are plans for a well-rounded collection which feature a complete series of Citadel uniforms from the time of the school's founding to the present, a representative collection of American military uniforms, including those of the Confederacy, a representative collection of American military weapons, and a collection of pictures and documents recording every aspect of Citadel history. Success of the museum program depends to a great extent upon the support of alumni and friends of The Citadel.

Begun in 1956 as a cadet activity, it has achieved its present status as a result of continuing efforts by cadet volunteers and the enthusiastic support of General Mark W. Clark.

Much of the responsibility for the operation of the Museum rests with members of the Cadet Museum Committee who assist, under the supervision of the Museum Director, in such important operations as cataloguing the collection, historical research, exhibit construction, and cleaning and preservation of articles in the collection.

As its collection grows and its permanent exhibits are constructed, the Museum will play an increasingly important role as guardian of The Citadel's proud heritage.

The Seraph Monument

H.M.S. *Seraph,* the submarine memorialized in the *Seraph* Monument, has a uniquely distinguished record, and many of her most fascinating exploits involved Americans. Embodied in this memorial are the *Seraph's* fore hatch, steering and plane wheels, her ship's bell and badge, and her periscope.

Seraph is best remembered for her role in the secret entry into North Africa of Gen. Mark W. Clark when he headed a spy team which made a clandestine rendezvous with Free French leaders there in the critical days of 1942 immediately prior to Allied landings on the North African coast.

During the same year this submarine successfully accomplished another secret mission that mystified the German enemy. In this episode she was the vessel that permitted French Gen. Henri H. Giraud to elude the Germans who had surrounded him in Southern France and to escape to aid the Allied cause. Since Giraud was at odds with the British, he insisted that he would make his escape only on an American submarine. No such vessel was then in the Mediterranean, so an American Naval officer was placed in technical command of the *Seraph*. For a time she had two captains and operated under two flags, the American and Royal Navy Ensigns which fly above the monument to commemorate this unusual co-operation between two nations.

Among the *Seraph's* many other historic missions was a gigantic ruse which saved thousands of Allied soldiers' lives in World War II. A book entitled *The Man Who Never Was* describes this adventure, and a motion picture was based on the book. Another book, *The Ship That Had Two Captains*, deals primarily with the Giraud adventure.

Utilities

The steam plant, laundry, machine shop, carpenter shop, paint shop, electric shop, warehouse, grounds shop, vehicle repair shop, and utility yard are located in the northwest portion of the campus. The tailor shop and the print shop are located at the rear of Padgett-Thomas Barracks.

Boating Facilities

Located on the east bank of the Ashley River, The Citadel has taken advantage of the splendid opportunities offered by the Charleston harbor and the local rivers for an almost year-round program of boating activities and water sports. The Citadel Yacht Basin has piers, slips, a floating dock for mooring boats, and power equipment for lowering and raising small craft into and out of the basin. A marine railway, hoist, boat shed, and locker and club rooms provide facilities for the care and maintenance of boats owned by cadets and those provided by the college, which include a fleet of Lightning Class sailboats, outboards, and other types of watercraft. Of particular pride to the college is the fifty-foot motor cruiser *Southwind*. All boating activities are under the auspices of the Yacht Club and are supervised by an experienced director. A separate boathouse houses two, four and eight-man racing shells used in the Physical Education Program.

GENERAL INFORMATION

Educational Standing

The Citadel is a fully accredited senior college. It is a member of the Southern Association of Colleges and Schools and of the American Council on Education and is on the approved list of the Association of American Universities.

The Civil Engineering Department is accredited by the Engineers' Council for Professional Development. The Department of Chemistry is accredited by the American Chemical Society.

Military Training

The Citadel is justly proud of the record of its Military Training Program which contributes significantly to the nation and the state of South Carolina in the form of military and civilian leadership. The Citadel is one of the few essentially Military Colleges remaining in the country. Today, Citadel graduates are adding to the rich heritage of their Alma Mater as officers in the armed forces and as leaders in the state and nation.

The military training at The Citadel is conducted by active duty U. S. Army and U. S. Air Force Officers and Noncommissioned Officers. The active duty Army and Air Force personnel are organized into the Department of Military Science (Reserve Officers Training Corps) and the Department of Aerospace Studies (Air Force Reserve Training Corps). The two active duty detachments conduct military training for all cadets attending The Citadel since it is a school requirement that all graduates must complete either the Army or Air Force program.

U. S. Army Program (ROTC)

Army ROTC graduates receiving reserve commissions serve two years on active duty in the Army. Those seniors who are designated Distinguished Military Students and, in addition, successfully graduate as Distinguished Military Graduates are offered a Regular Army Commission and will serve a minimum of three years on active duty. Army ROTC seniors who qualify may participate in the light aircraft pilot training program.

A large number of Citadel graduates are commissioned each year in the Regular Army. It is a tribute to The Citadel, the caliber of its cadets, and the Army ROTC program that in recent years more cadets from The Citadel have been awarded Regular Army Commissions than from any other ROTC unit in the nation.

Prospective cadets who desire a military career should investigate the Army's new ROTC scholarship program. One, two, three and four year scholarships are awarded each year on a competitive basis. Additional information concerning the procedures for applying for these scholarships and their value can be obtained by inquiry to the Pro-

fessor of Military Science at The Citadel. For more information on the ROTC Program see the section entitled Military Science Department in this catalog.

U. S. Air Force (AFROTC)

The Department of Aerospace Studies is responsible for the operation of the Air Force ROTC Program at The Citadel. The purpose and specific objectives of this program are to select and motivate cadets who desire to serve as career Air Force Officers in the many challenging fields of endeavor required by the United States Air Force.

Historically, the Air Force has been a voluntary service. It has never sought draftees, nor wanted to coerce anyone to join its ranks. Believing that quality begets quality, Air Force ROTC has given a great deal of attention to improving its curriculum and teaching methods, so as to attract students who are superior. Today, more than ever, the Air Force needs top quality junior officers in practically every field of endeavor: pilots, navigators, engineers, scientists, doctors, lawyers, as well as specialists and managers in such fields as transportation, public relations, procurement, maintenance, communications, electronics, weather, intelligence, law enforcement, accounting, administration, personnel and countless others.

Additional information concerning the procedures for applying for the Air Force ROTC program, Air Force ROTC college scholarships, and the light aircraft pilot training program offered by The Citadel AFROTC Detachment, is included in the Department of Aerospace Studies section of this catalog.

Selective Service

Cadets accepted for formal enrollment in Army or Air Force ROTC are, by special provisions of law, exempted from registering for Selective Service. (Requirements for formal enrollment are listed under Department of Military Science and Department of Aerospace Studies.) Those cadets who have already registered with the Selective Service and are formally enrolled in The Citadel ROTC program are exempt from induction by such enrollment, and the Military Science and Aerospace Studies Departments will notify draft boards of these exemptions. However, both conditions continue only so long as the cadet is formally enrolled and the Military Science and Aerospace Studies Departments are obligated to inform local draft boards when such status changes.

Cadets of draft age (18 years or above) who fail to qualify for formal enrollment and/or who are removed from formal enrollment, are responsible for registering for Selective Service. The Citadel Registrar will send Selective Service Form 109 to such cadet's Selective Service Board informing the board of the cadet's student status.

Marine Corps Program

The Marine Corps offers commissions to college students through the Platoon Leaders' Class Program. If the student qualifies, he will

attend two six-week summer sessions at Marine Corps Schools, Quantico, Virginia. The Marine Corps Officer Selection Officer makes frequent visits to The Citadel during the college year to interview interested cadets.

Religious Influences

The Citadel is non-sectarian, but its high objectives cannot be achieved unless its educational program is founded on a solid religious life. Divorced from the spiritual aspirations of the individual and of the group, education is likely to destroy greater values than it creates. The basic purpose of education is to integrate its curricula with character-building activities and a normal religious life to the end that young people may be not only more efficient but better motivated by a sense of duty and obligation. Thus, in an atmosphere of tolerance and mutual respect, every cadet is encouraged to maintain his ties with the religious group to which such association may be made most fruitful.

It is significant that the college in planning its building program included a cadet chapel which in size, dignity, and beauty would be a fitting reminder to all cadets that education must be founded upon spiritual strength. This building, imposing and churchly, always accessible, is dedicated to no denomination or creed, but is a shrine of religion, of patriotism, and of remembrance in which any group of good will and seemly purpose may hold services and feel at home in doing so.

In keeping with the religious emphasis at The Citadel, a full-time chaplain is available to all cadets for counseling, guidance, and spiritual advice. Colonel Sidney R. Crumpton, retired Army chaplain, assumed his duties on February 1, 1962.

At nine-thirty each Sunday morning a General Protestant religious service is held in the Summerall Chapel. The Episcopal service is also held at the same hour in the Episcopal Chapel in Bond Hall. The Jewish and Greek Orthodox services are held at nine o'clock in Mark Clark Hall. At 10:30 a.m. Low Mass is observed for the Roman Catholic Cadets at the Summerall Chapel. Attendance at Chapel services is required for those cadets who are on the campus.

Each Sunday evening at seven o'clock, a short but impressive Vesper Service is held in the Chapel for those desiring to attend. Five minute Morning Devotions are conducted by the cadets each morning, Monday through Friday at 7:45. Though the attendance is voluntary, the number attending is most gratifying. In addition to these services, each Wednesday evening a Bible Study and Prayer Service is held for those cadets desiring to attend.

Special services are held for Episcopalians on Ash Wednesday and Good Friday and the special early masses on holy days of obligation for Roman Catholics. During the Advent season, and shortly before the beginning of the Christmas furlough, a great carol service is held. Annually, parallel religious emphasis week programs are conducted under four auspices—those for Protestant cadets, the Newman Foundation for Roman Catholics, the Hillel Club for the members of the Jewish

faith, and the Greek Club for the Orthodox group. These programs, led by outstanding speakers, are intended to bring into clearer relief a sense of the dignity and manliness of the religious life.

In all the services thus conducted and in the other influences which the college brings to bear on its cadets, the casual and perfunctory is avoided. Cadets are encouraged to regard contacts with their church as vital to their education and development, the act of worship as a deeply significant experience that should be accompanied by dignity, reverence, and gratitude. Thus, on Sunday mornings one may view the impressive ceremony of battalions of cadets, each marching from their respective barracks across the drill field and converging on the chapel, and will sense no evidence of mere routine in their attitude. On the contrary, in this spectacle and in the service that follows, there is a fine manifestation of respect and reverence for this hour as the most significant of the entire week. The college realizes that these services, and the underlying religious life of which they are the outward manifestations, must be more than a mere gesture. Otherwise young men will find, as their intellectual horizons widen and they come into possession of the uncertain techniques of lay learning, that there is a temptation to abandon religious teachings as a guide and to substitute "reason" for faith as the ultimate guide. From this peril, education must protect itself by constantly reminding young people that education builds and enriches life not by abandoning religious faith as outmoted, but by accepting it as the source of truth and understanding.

The inscription on the front of the chapel is "Remember now thy Creator in the days of thy youth."

Religious Groups

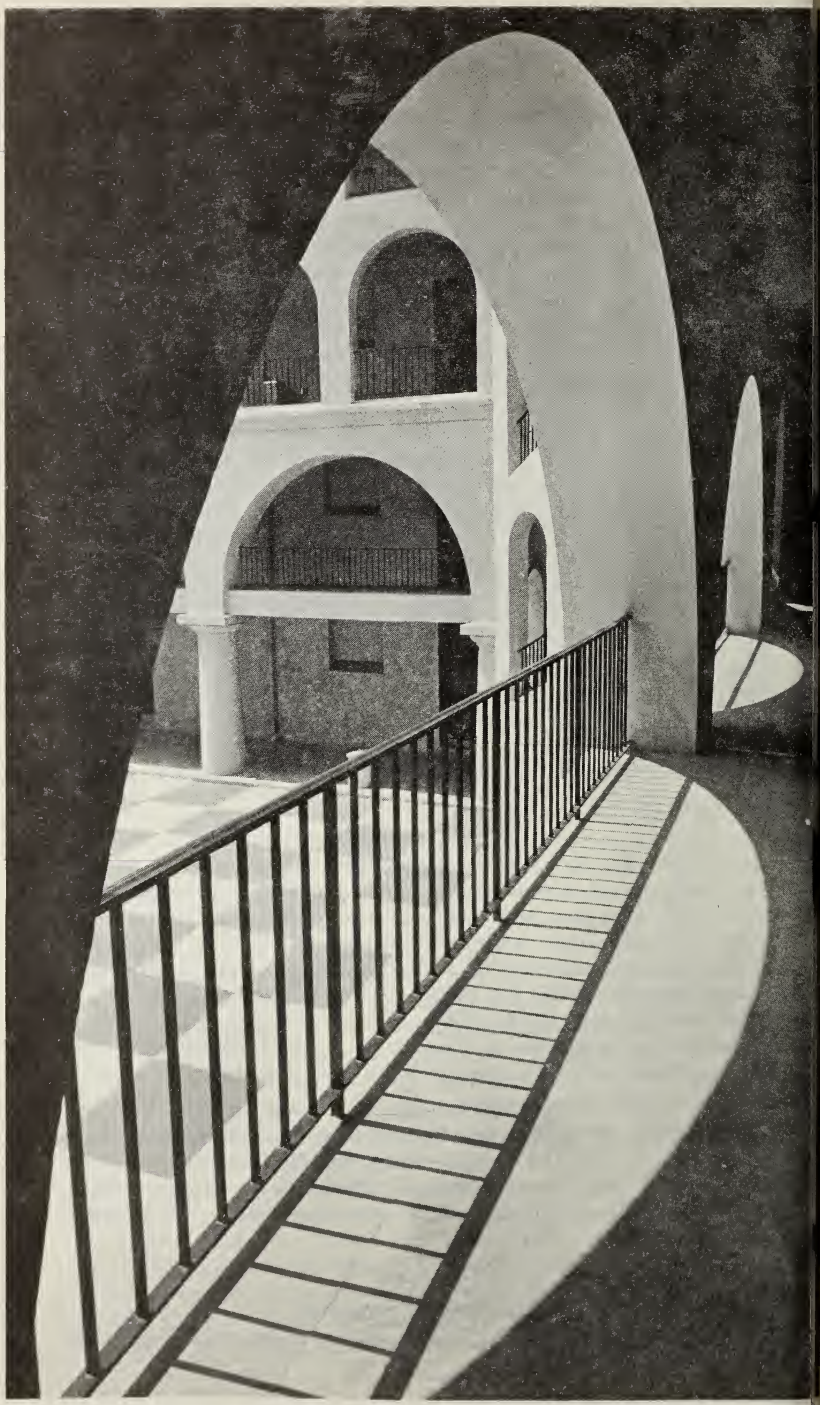
Opportunities for religious development also are afforded through the Monday night denominational group meetings. These programs do not exceed an hour in length and are directed by the cadets themselves. Interesting and worthwhile programs are planned in advance by the program committee of each denominational group. Denominational chaplains from the major religious faiths in Charleston act as spiritual advisors to the cadets of their groups. Every cadet is encouraged to participate in these denominational meetings, so that he may leave The Citadel stronger in his faith than before he entered.

The Citadel Religious Council

The purpose of the Religious Council is to direct the course of religious activities at The Citadel under the President and with the supervision of the College Chaplain. The planning and supervision of all the religious programs of the year come under the direction of this council.

THE HONOR SYSTEM

The Honor System of the Corps of Cadets makes a unique contri-



bution to the overall educational process at The Citadel. The Citadel is one of the few schools in our country that pays attention to the development of a sense of honor and duty as a part of the education of a young man. It is an integral part of the training received by a cadet, and the purpose is to inculcate a sense of honor in each Citadel graduate so that he instinctively conducts himself in an honorable manner under all circumstances.

The Honor Code is of, by and for the Corps of Cadets. It states simply that a cadet does not lie, cheat, or steal, nor tolerate those who do. The Honor Code is enforced and supervised by a Cadet Honor Committee made up of twenty-one members of the first class who are elected by the three lower classes during the second semester of their second class year. The Honor Committee has a representative in each company, and one of his duties is to instruct incoming freshmen in the honor system. He also interprets the honor system during the year for all cadets in his company.

When a cadet is reported for an honor violation, the circumstances are thoroughly investigated and if there is a prima facie case established against him he appears before an Honor Court composed of ten members of the Honor Committee. Conviction by the Honor Court requires a unanimous secret vote of "guilty" by the court. It a cadet is found guilty by the Honor Court and the President approves the findings of the court, the cadet resigns from the Corps of Cadets.

The Honor Committee is responsible directly to the President. Each year the President appoints a Faculty Advisor to the Honor Committee. This officer counsels the Honor Committee and acts in an advisory capacity at each Honor Court trial.

The Honor Committee distributes to all cadets for their guidance an honor manual describing the honor system and its procedures.

General

The Commandant of Cadets commands and administers the Corps of Cadets and its daily routine of duties. He grants leaves and other privileges provided by regulations and is charged with the maintenance of discipline over all students attending The Citadel. The department exercises supervision over barracks, controls the Officer in Charge and the cadet guard, and keeps the President of the College informed of matters pertaining to the conduct and discipline of the Corps of Cadets.

The Citadel is a military college, and it is therefore essential that a high standard of discipline be maintained. Through a system of merits and demerits, a record is kept of the conduct of each cadet. This record influences his military standing. Privileges are curtailed for those cadets who fail to respond to ordinary corrective measures. Any cadet exceeding the allowed limit of demerits for the year may be dismissed.

By instruction and example cadets are taught to be neat in person and in uniform. Daily inspections of rooms insure cleanliness and good order. Through individual personal contact and group meetings, cadets are encouraged to uphold the traditions of The Citadel and the standards of honor, integrity, and courtesy which are an outstanding mark of the cadet and gentleman.

System of Management

Leadership, initiative, and character are developed by placing upon cadets the stimulating responsibilities of command within the organization.

All cadets live in barracks. From reveille to taps, every hour of the cadet's time is accounted for. The regular habits of study and living thus formed, the attention to duty, obedience to authority, and love for order inculcated are considered among the most valuable features of the military education. While some of the graduates enter the military profession, hundreds in all walks of civil life attest to the high value of the training received at the institution.

The daily routine is regulated by the *Cadet Regulations,* generally known as "The Blue Book."

The Fourth Class System

The purpose of the Fourth Class System at The Citadel is to lay the foundation, early in a cadet's career, for the development of those qualities of character and discipline implied in the mission of The Citadel as a military college—to produce young men with alert minds and sound bodies who have been taught high ideals, honor, integrity, loyalty, and patriotism; who accept the responsibilities which accompany leadership; and who have sufficient professional knowledge to take their place in a competitive world.

These personal qualities must be deeply ingrained in the individual so that neither time nor troubles will erase them from his compliance with the customs and traditions set down for the fourth

classman's conduct. The tradition of The Citadel cannot be maintained by men who will do no more than is required of them. Self-discipline and self-evaluation develop men whose integrity and sense of duty cause them to serve selflessly beyond the prescribed limits of their tasks.

The Fourth Class System is both difficult and demanding. It represents an abrupt change from the life normally experienced in the home, and encompasses the entire period of a cadet's first year at The Citadel. It is administered impersonally, but at the same time exhibits the individual understanding necessary to effective leadership. It requires a full measure of mental preparedness and physical endurance.

Because of the nature of the new cadets' training during their first weeks at The Citadel, physical demands upon them are necessarily great. Experience indicates that those cadets who, prior to admission, have conditioned themselves physically are best able to meet the training requirement. The candidate should strive for the degree of conditioning required for vigorous team sports. He is advised to practice heavy physical conditioning exercises (such as pull-ups, sit-ups, and push-ups) until many repetitions of the exercises can be performed without severe physical strain. In addition, he should strengthen his legs and wind by regular cross country running. A program of vigorous competitive sports should be followed, with emphasis on a variety of sports rather than one favorite activity. Any candidate in doubt about his physical-conditioning methods would be well-advised to consult a high school or college physical education department. In addition, every applicant for entry into The Citadel should be assured by his physical examination that he has no history of physical ailments that might prove recurrent.

The Fourth Class System by nature is arbitrary on the surface. It demands prompt and unquestioning obedience to authority through the use of a collection of customs and traditions. However, each of the elements or customs has a specific purpose of furthering a cadet's development.

The system is patterned after those used at our service academies and includes standing at a rigid position of attention (bracing), turning square corners when walking, undergoing neatness inspections before formation, learning various items of Fourth Class knowledge, working on approved company details such as minor chores incident to keeping their own area of barracks in order, and submitting to a variety of minor restrictions concerning the use of certain campus grounds and facilities, the wearing of the uniform, and the general conduct of a Fourth Classman.

Cadets who are unable to meet the desired standards or violate one or more of the customs are subject to corrective action. This can range from a verbal reprimand to walking tours on the quadrangle

of barracks. Other disciplinary measures include restriction to limits of campus, confinement to rooms, undergoing special inspections, and participating in special constructive physical training periods like those employed by the U. S. Armed Services. In extreme cases, any cadet freshman or upperclassman who is unable to conform to the military way of life may be brought before a suitability board to determine his fitness to continue at The Citadel.

The various measures described above are designed to test a cadet's mettle and to determine his motivation for cadet life. Their value lies in developing a cadet's ability to perform his duty successfully under trying and stress-producing conditions.

Hazing is not a part of the Fourth Class System and is not condoned. The suffering of degradation, humiliation, and indignity does not foster the rapid development of those qualities sought in Fourth Classmen.

At The Citadel, where the system is administered by upperclass cadets and where all the cadets live together in barracks, the presence of individuals who are obsessed with the idea that indignities and humiliation are part of a student's education cannot be and is not tolerated. No cadet is wanted in the Corps who does not subscribe voluntarily to the regulations which absolutely bar hazing. The occasional upperclassman who misuses the system is dealt with severely.

It is to be emphasized that the Fourth Class System is a formidable challenge to any young man. The decision to enter The Citadel must be preceded by a conviction on the part of the prospective cadet and his parents that he has the mental and physical characteristics appropriate to the system, and that he possesses a willingness to undergo the system's rigors with a determination to see it through and to reap its benefits.

Although the system is demanding and difficult, the rewards are considerable. They more than justify the effort. At recognition by the Corps in June, a better man emerges—one who is mentally, morally, physically, and spiritually prepared to accept the reins of leadership which will ultimately be his at The Citadel and in the world.

Allowances of Demerits

When any cadet accumulates more than 130 demerits in his First Class year, 150 in his Second Class year, 170 in his Third Class year or 200 in his Fourth Class year, such cadet shall be declared deficient in conduct and reported immediately to the President for dismissal. Cadets repeating the Fourth Class are allowed but 170 demerits.

Customs and Courtesies

"Customs and Courtesies," a thirty-seven-page booklet published at The Citadel, is designed to provide cadets with a compact manual of good deportment. This manual is used as the textbook in a course

in deportment given under the supervision of the Commandant of Cadets.

After explaining clearly the value of a knowledge of the correct way of conducting oneself in social contacts, the booklet presents detailed information on such matters as personal appearances and dress, correct speech, table manners, introductions, calling cards, calling, social correspondence, overnight visits, and punctuality.

Automobiles

Cadets of the first, second and third classes, proficient academically and in conduct for the preceding semester, are granted the privilege of having cars and parking them in assigned class parking areas on the campus. The privilege may be withdrawn on loss of good standing. Cars must be registered with the Provost Marshal. Evidence of legal state registration must be shown and all registrants will be required to have a minimum of bodily injury liability insurance, $10,000 per person, $20,000 each occurrence and property damage liability insurance, $5,000 each occurrence. Parking permits in the form of stickers will be issued to each registrant on the day he brings his car on the campus. Stickers will be affixed permanently on the left-front and the rear bumpers of the car.

Emergency and Special Leaves

By applying for permission for their sons' entry to The Citadel, parents voluntarily relinquish control over them to the authorities of the college, and it is expected that they will not ask for leaves for their sons except in emergencies. In every case the reason for the leave should be stated and the decision left to The Citadel authorities whether the circumstances warrant the approval of the application. This must be done before leaves will be approved.

The paragraphs which follow are extracted from regulations for the Corps of Cadets of The Citadel.

126.07. EMERGENCY LEAVES: a. Emergency leave may be granted only upon the request of the parent or guardian in the event of death or critical illness of a member of the cadet's immediate family. Duration of this leave will be predicated upon distance and time required, but should normally not exceed 72 hours. The immediate family includes parents, grandparents, brothers, sisters, and the permanent resident members of the family.

b. "Critical illness" is defined as an illness of such proportions that death is imminent.

Special leave may be granted upon the request of the family or guardian in the event of the marriage of a member of the cadet's immediate family or golden wedding anniversary in the cadet's family.

Cadets may be granted special leave for such unusual business affairs as cannot be arranged by correspondence, but require the

presence of the cadet in person, in which case applications from parents or guardians stating the circumstances are required. In all cases, the final decision must rest with the authorities of the college.

140.09. CADETS FORBIDDEN TO ARRANGE FOR MEDICAL SERVICES: Except in emergency occurring on leave and requiring immediate medical attention, a cadet will not arrange for or receive professional treatment from doctors or specialists without permission of the Surgeon. Applications for any special leaves required for such treatment will be submitted to the Commandant and referred to the Surgeon.

140.11. SPECIAL MEDICAL AND DENTAL SERVICES: a. Dental work, special examinations of the eyes, etc., should be looked after during the Summer, Christmas, or Easter furlough periods. Special leaves will not be granted for these purposes.

b. In cases of emergency, there are competent specialists and ample facilities in Charleston to take care of any medical or dental needs of cadets. In matters of health, the regular Surgeon of the College will advise the proper course to be taken. In case the service of a local dentist, oculist or other specialist is deemed necessary, the request therefor will be submitted to the Surgeon, who if he approves the request, will make all necessary appointments for the cadets. No appointment with physicians other than the Surgeon, will be made by any cadet to keep an appointment with a doctor in Charleston.

Week-End Leave

Generally, week-end leaves are authorized in the numbers shown below, provided the cadet is proficient in academics and conduct.

a. Week-end leave begins after parade or 4:00 p.m., whichever is later, on Friday and ends at 10:30 p.m. Sunday.

First	4	4	8
Second	3	3	6
Third	2	2	4
Fourth	None	1	1

b. Overnight leave begins after all scheduled duties or 11:00 a. m., whichever is later, on Saturday and ends at 10:30 p.m. on Sunday.

First	Unlimited	Unlimited	Unlimited
Second	4	Unlimited	
Third	3	3	6
Fourth	None*	2	2

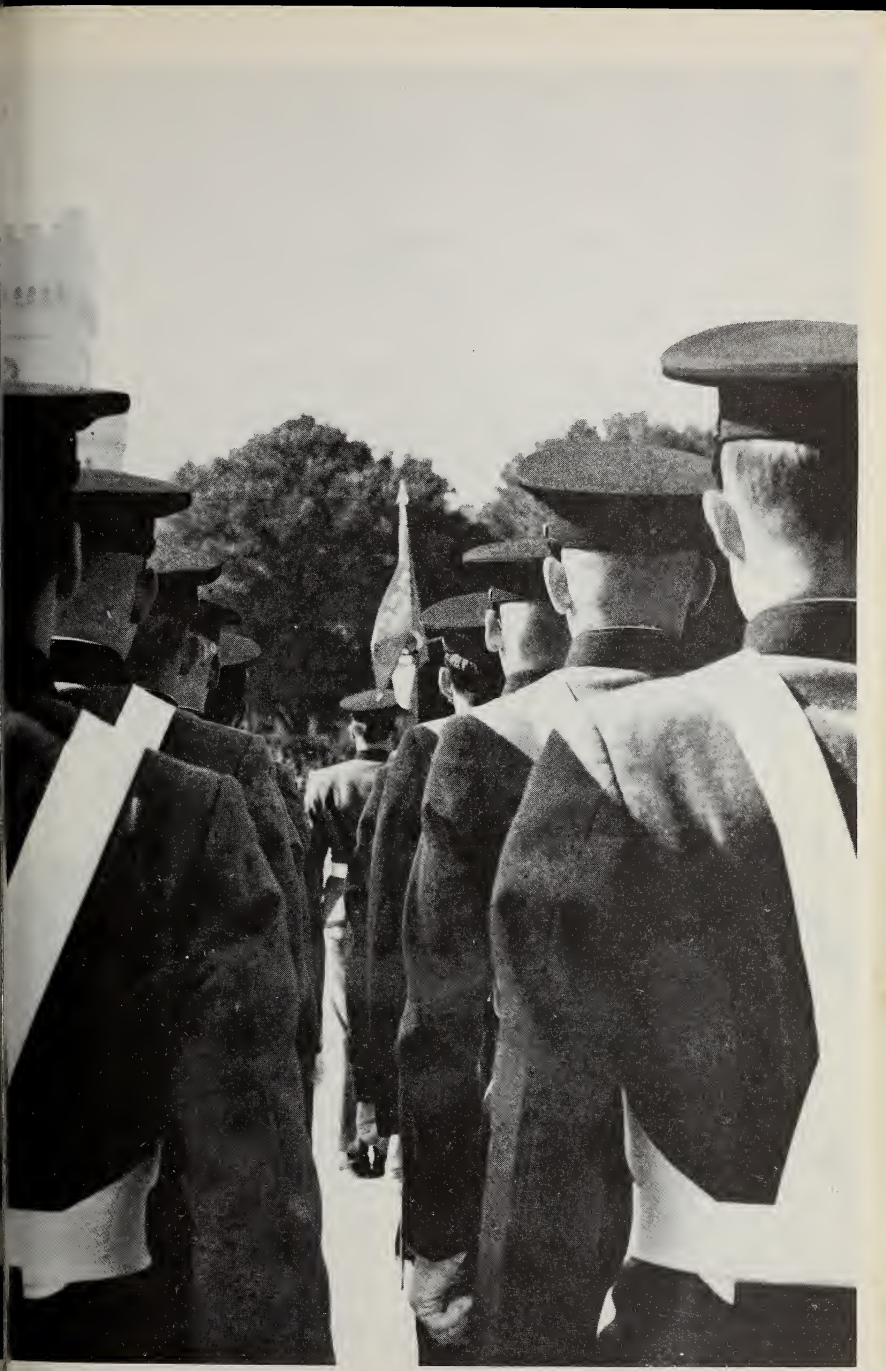
Fourth Classmen who acquire a grade average of 2.0 and has no failing grades at the mid-term grade report are authorized one over-

night leave during the second half of the First Semester.

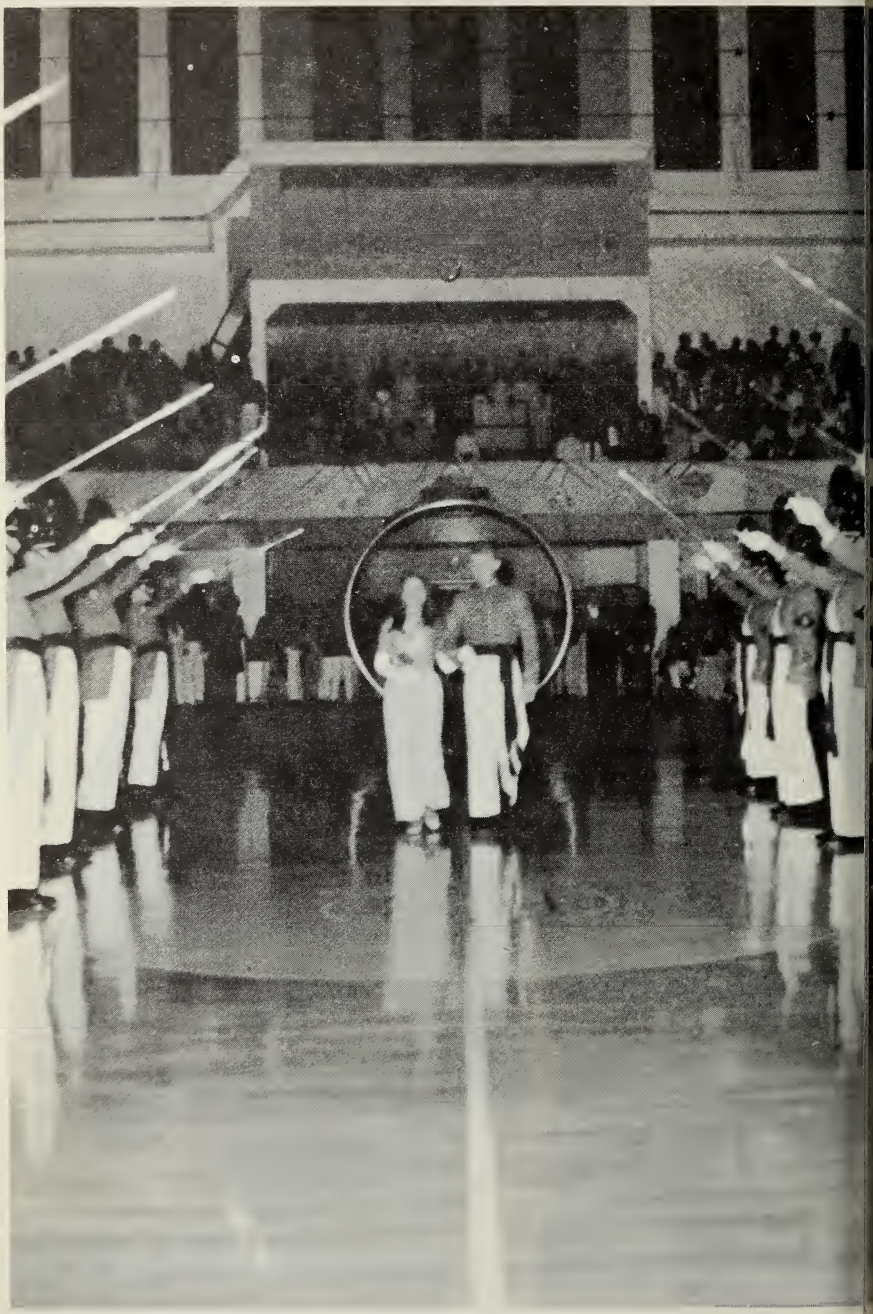
The Commandant of Cadets will assume that all cadets have permission to avail themselves of this privilege unless notified to the contrary in writing by parents or guardians.

Furloughs

Suspension of work for ten days, including Christmas Day and New Year's Day, is required by law. Normally furloughs are granted at Thanksgiving, at Christmas, at Easter, and upon completion of the Second Semester.



Cadet's view of a Friday afternoon parade.



Ring Hop

Cadet affairs are those activities in which cadets are involved when outside of the classroom. Their purpose is to provide for each cadet the choice of engaging in one or more of the sponsored activities in order to assume his Citadel community responsibility in an area of his liking and capability.

When new cadets report to the college, all are at once put in uniform; and, as far as possible, all artificial distinctions based on wealth, position, or influence are minimized, and the cadet is encouraged to achieve his place by individual merit.

Although all cadets live under practically identical conditions and are rated be the same standards, cadet affairs offer a wide range of opportunities for each to develop in accordance with his individual needs and aptitudes. Elsewhere in this bulletin the various activities that are open to cadets are described.

Committees of the Corps of Cadets

The President's Advisory Committee was inaugurated for the purpose of keeping the president and the Corps of Cadets working in congenial relationship.

The Cadet Orphanage Fund Committee is directly in charge of all phases of its program. The objective is to give the children of the Charleston orphanages a better Christmas. The committee collects donations from cadets, finds out the needs of the children, makes the purchases, and wraps and tags the presents by name. On the last day before Christmas furlough the cadets form a motorcade to visit each of the orphanages to present the gifts in person. This program was organized in 1952. The Orphanage Fund Committee maintains two all expense scholarships for cadets who enter The Citadel from an orphanage.

The Cadet Activity Advisory Committee has the mission of advising the Cadet Affairs Dean on all activities under the jurisdiction of that office. The committee pays particular attention to the auxiliary enterprises which include the cadet canteen, the barber shop, the billiard room, the bowling alleys, and the servicenter.

The Ring and Invitation Committee

The Ring and Invitation Committee of the First Class is charged with the responsibility of purchasing the class rings and the commencement invitations of the class. Specific regulations govern the design and specifications, the award of the contract for manufacture, the ordering, and the wearing of the ring. The committee is in charge of the ceremonies conducted when the first classmen receive their rings.

Social Events

All Citadel dances are under the sponsorship of the Standing Hop Committee, an organization selected from each of the class of the Corps. The duties of this committee are to set dates for the dances,

provide bands, and coordinate all plans for the hops held for the Corps.

The Citadel hops are the highlights of the social activities of the cadet. As dances are strictly for and by cadets, few invitations are issued to civilians. The formal hops held annually are the Homecoming Hop, First Class Ring Hop, the Corps Day Hop. Although these dances are formal, by tradition corsages are not worn by the cadets' dates. In addition to the formal dances, several informal concerts are held throughout the year. Often the cadet orchestra, "The Bulldogs," plays for informal dances. Every cadet is privileged to attend the social activities held.

The College Hostess

The Citadel hostess, Mrs. A. E. Dufour, serves as social advisor for students. Her office is located in the reception room of Mark Clark Hall. Under her supervision dancing classes are conducted and informal tea dances are held in the auditorium on weekday afternoons. At the time of formal hops, she arranges for overnight accommodations in private homes for the ladies from out-of-town and plans for refreshments and the care of personal effects at the hops. She keeps the reception room open and maintained in good taste for the use of cadets and their guests from 9:00 a.m. until 5:00 p.m. daily. The hostess serves the students constantly in the discussion and solution of their personal problems.

The Fine Arts Series

Now looking forward to its sixth season, The Citadel Fine Arts Committee will continue its efforts to make available a program which will be both entertaining and instructive. During the first five years of the series, cadets have been able to attend three Shakespearean plays, T. S. Eliot's *Murder in the Cathedral,* and a dramatic presentation of the poetry of Robert Frost. They were treated to performances of the traditional dances of Spain, Korea, France, and Yugoslavia by companies from those lands. As soloists they have heard Nell Rankin, Metropolitan Opera mezzo-soprano; Ruth Slenczynska, pianist; Leonard Rose, cellist, and Sabicas, Flamenco guitarist. Groups presented have been the Nadeau String Quartet, from Canada; Stockholm University Chorus; the New York Woodwind Quintet, the New York Brass Quintet, the Metropolitan Opera Studio Ensemble, the Longines Symphonette; the Tyre Harp Ensemble, and a Consort of Viols. A very special experience was provided by the presentation in Summerall Chapel of Benjamin Britten's *Curlew River,* an opera for church performance. The series next year will present new artists and performances of a kind not yet offered.

Publications

The Brigadier is published semi-monthly by a staff of cadets. It serves as the campus newspaper and is financed by an allotment from

the student activities fee, augmented by the revenue from subscriptions and the sale of advertising space.

The Shako, the literary magazine, is published three times a year. It is supported by an allotment from the student activities fee.

The Sphinx is published annually by a staff of cadets. This publication serves as a semi-official record of the year. By means of copy and photographs, the faculty and staff, student classes, military organizations, athletic activities, social affairs, and other student programs are portrayed vividly to preserve a record of student life for posterity. *The Sphinx* is financed by an allotment from the student activities fee and the sale of advertising space.

The Guidon, the cadet handbook, is published annually by a staff of cadets. The handbook contains a complete description of the activities of the college, college history, customs, duties and responsibilities of cadets and deals with other phases of cadet life. It is particularly helpful to entering freshmen. The publication is financed by the allocation of a portion of the student activities fee. It is distributed to all students at the beginning of the college year.

Activities Coordinated by the Department

Many of the cadet activity organizations of real importance in the educational training process function under the academic, the military, or the athletic departments with which they are separately and directly related. The department seeks to assist in the coordination of the following categories: the literary and discussion groups, the professional clubs and societies, musical organizations, and certain other organizations.

Literary and Discussion Groups

Six student societies offer opportunities for discussing subjects of cultural interest and for developing proficiency in public speaking: the Calliopean Literary Society, the Polytechnic Literary Society, Council on International Relations and United Nations Affairs, the English Club, the History Club, and the Round Table.

The Calliopean Literary Society sponsors forensic interest including radio speaking, intramural and intercollegiate debating, and oratory. Membership is open to all students.

The Polytechnic Literary Society, organized in 1847 and reactivated in 1965, undertakes each year an active program of formal intercollegiate and intramural debate on the national college topic. The purpose of the society is to promote sound inquiry into questions of current national import as well as to develop excellence in public speaking. Members of all four classes are invited to join.

Council on International Relations and United Nations Affairs is devoted to the study of contemporary world economic and political problems. Membership is restricted to those students especially interested in government and politics.

The English Club is an organization of students interested in English.

Professional writers are heard and problems of literary interest are discussed.

The History Club has as its purpose to promote interest in the study of history through a study of outstanding historians, through visiting historical sites, and through informative speeches by faculty, students, staff, and outside speakers.

The Round Table is a discussion group with a limited membership. Elections are made from lists prepared by the faculty of those students with marked intellectual interest.

Other clubs and groups are:

Pi Sigma Alpha, The National Political Science Honor Society,
Phi Alpha Theta Society, National Honor Society in History.
Public Relations Committee,
Political Science Club,
The Citadel Delegation, S. C. State Student Legislature,
Alpha Phi Omega, National Service Fraternity,
Circle "K" Club, and the
Automotive Club

Professional Clubs and Societies

The following professional clubs and chapters of national professional societies are to be found at The Citadel: Knox Chemical Society; Pre-medical Club; Student Chapter, American Society of Civil Engineers; Sigma Pi Sigma, national honor society in physics; Student Chapter, Society of American Military Engineers; Student Chapter, American Ordnance Association; Economic Honor Society; Association of the United States Army; Beta Iota Chapter of Pi Sigma Alpha, national political science honor society; Phi Alpha Theta, national honor society in history; Mathematics Society; Student Chapter, American Road Builders Association; Student Section of American Institute of Physics; Student Education Association of South Carolina.

Music

The cadet orchestra, under the direction of Captain E. R. Mays, furnishes the music for informal dances.

The Citadel Chapel Choir, under the direction of Mr. Vernon W. Weston, serves as the choir at chapel services and gives programs in Charleston churches.

The Citadel Band, under the direction of Captain E. R. Mays, provides the music for parades, reviews, and other official ceremonies.

Both the Drum and Bugle Corps and The Citadel Bagpipers are integral parts of the Band. Captain L. J. Grant-Alexander is the Pipe Major.

Other Organizations

There are several important cadet organizations that do not come under a specific classification. The following should be mentioned as

having distinctive functions in cadet life: The Summerall Guards (first classmen), the Bond Volunteers (second classmen), the Junior Sword Drill, Sons of the American Revolution, Alpha Phi Omega (scouting), the Camera Club, and the regional cadet clubs.

Recreational

The Citadel Yacht Club

The Citadel Yacht Club membership consists of all members of the Corps of Cadets, faculty, and staff. There are no dues connected with the membership, and preference is given to cadets in the use of club facilities.

The club fleet consists of a fifty-four foot cabin cruiser, twenty small sailboats, and five outboard motor boats. These craft are all available to cadets, and instruction is available for all cadets by experienced cadets of The Citadel Sailing Team. Intramural sailing competition is conducted among qualified small boat handlers. This program enables any cadet to become proficient in a sport which he can carry over into later life.

Yacht Club facilities consist of a club house, storage area for small boats, dockage, marine railway, sail loft, and work area for maintenance and repair of small boats. Cadets may use the facilities of the Yacht Club for privately owned boats, to include storage for a small fee.

The Rod and Gun Club

All four classes are permitted to participate in its activities. The club room, in the rear of the Armory, provides a convenient place for meetings, contains personal lockers, and a gun rack facility which was constructed by cadet members. Organized hunting and fishing trips and a growing number of outdoor activities are available.

The club has available an automatic trap range. A shot-shell reloader provides members a weekly shoot at a low cost. The main objectives of the club are to extend an appreciation for good sportsmanship and to increase the enjoyment of outdoor activities.

The Citadel Flying Club

The purpose of The Citadel Flying Club is to promote interest in aviation and flying among the Corps of Cadets. The club owns and operates a Piper Colt aircraft, which is available for instruction at a reasonable fee and also for cross country flights by qualified cadets. All flying is performed in strict compliance with regulations of the Federal Aviation and the club. Membership is open to all cadets and is gained by application and approval by a majority of the active members. Permission of a cadet's parents is required for membership.

Facilities

Mark Clark Hall

Many of the cadet affairs are housed in Mark Clark Hall, The Citadel's student union building. This handsome and spacious structure was dedicated on May 31, 1957, and was completely furnished and equipped for the opening of the 1957-1958 session. The Board of Visitors of The Citadel named the structure Mark Clark Hall to honor General Mark Wayne Clark, president emeritus. Mark Clark Hall was constructed and furnished at a cost exceeding $1,000,000 from tuition fees paid by cadets; no State appropriation was required to defray this cost. The facilities which are provided are listed as follows:

First Floor	Second Floor	Third Floor
Reception Room	Lounge & Club Room	*Sphinx* Staff Office
Cadet Canteen	Kitchen	*Brigadier* Staff Office
Barber Shop	Cadet Store	*Shako* Staff Office
Post Office	Alcove Lounge	*Guidon* Staff Office
Billiard Room	Auditorium	Honor Court
Bowling Alley	Television Room	Projection Booth
	Executive Offices	Dark Room
	Fund Raising Office	Game Room
		10 Guest Rooms
		Catholic Chaplain's Office and Chapel

Full use is made of all these facilities. Cadets, alumni, and friends of The Citadel are proud of the fine edifice which contributes much to stimulate interest and participation in extracurricular activities.

The Beach Club

The Colonel Robert R. McCormick Beach Club of The Citadel, located on The Isle of Palms, was dedicated on November 30, 1958. It offers to cadets unparalleled opportunity for enjoyment of sun, sea, and surf. The beautiful, two-story club house is on a five-acre tract overlooking the Atlantic. The club was named to memorialize a great American soldier, editor and philanthropist, Colonel Robert Rutherford McCormick, whose gift to The Citadel made possible the construction of the facility.

The Beach Club is for the use of cadets, staff, faculty, and their guests only.

The simple, necessary rules and regulations for the use of the club state that drinking or the possession of alcoholic beverages is prohibited; cadets must be in complete uniform when arriving and leaving. Swimming suits or appropriate civilian clothes are worn at the club; swimming is authorized only when life guards are on duty; no bathing suits may be worn in the main upstairs room, but they may be worn on the porches; cadets will limit visitors to three, except when

visiting families are guests. Violations are handled by the Cadet Beach Club Committee.

The Beach Club hours vary with the seasons of the year and are set to accommodate the needs of the cadets and summer school students. Parts or all of the facilities may be reserved for group functions.

The Beach Club is well equipped for parties. On the second floor, in addition to a large screened porch, is a modern kitchen and a general purpose room with huge open fireplaces at each end. The ground floor contains an apartment for the resident custodian and the bathhouse area.

On the property stands an enclosed barbecue and grill area which offers protection from the elements for parties suited for these facilities. An oyster roast grill and four shuffleboard pads are located, each with picnic table and running water. The area is floodlighted to facilitate nighttime parties for small groups.

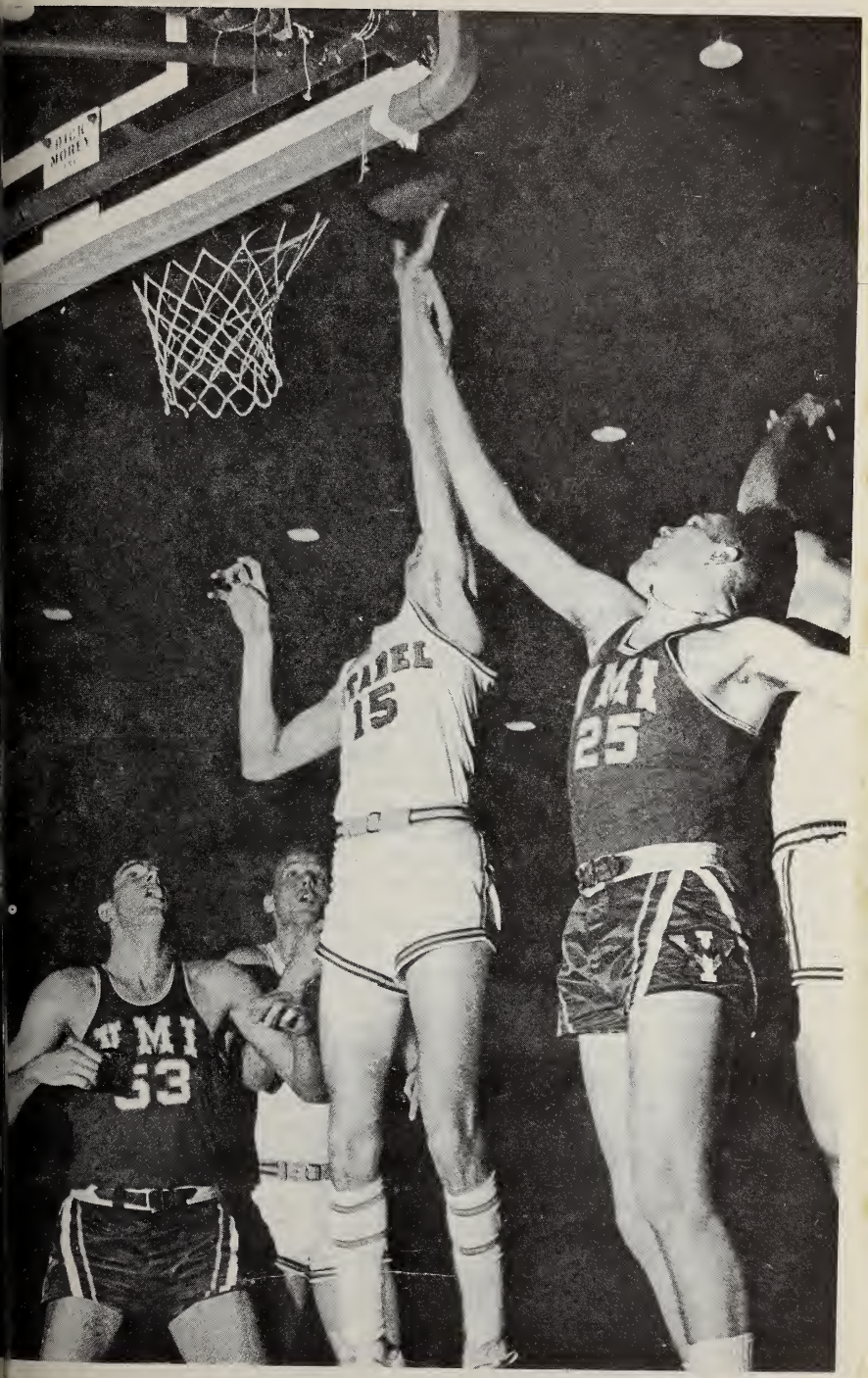
Auxiliary Enterprises

The Citadel owns and operates all auxiliary enterprises under the supervision of the Department of Cadet Affairs. These enterprises are in existence primarily to provide appropriate and timely services for the convenience of the Corps of Cadets. The net profits from each enterprise are deposited in the Mark Clark Hall Fund. This fund is used exclusively to foster and support other phases of cadet life as directed by the President of The Citadel.

These enterprises are the barber shop, billiard room, bowling alleys, cadet canteen, service station, and automatic vending machines. The auxiliary enterprises are under the direct management of Major Harvey F. Brand.

Service Station

The Citadel Servicenter, located east of the Armory, fills a real need for convenient vehicle service. The service sation hours are regulated to accommodate the needs of the cadets, faculty, staff, and other employees of The Citadel. The prices charged those eligible to use the services are reasonable, and the station is fully equipped.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DEPARTMENT OF INTERCOLLEGIATE ATHLETICS

Faculty Chairman of Athletics: Col. D. S. McAlister
Director of Athletics: Edward L. Teague
Associate Director: D. C. Henry Witt
Executive Director, Brigadier Club: A. V. Hogan
Sports Information Director: William E. Hallman

Coaches

Football Head Coach: Jimmy D. Parker; Assistants: Harold M. Steelman, Robert E. Gatling, Chalmers M. Port, Dwight Adams, Donald A. Murry, Bobby S. Roper, Paul Hamilton, Jr.
Basketball Head Coach: Dick Campbell; Assistants: Cliff Malpass, Les Robinson
Baseball: Chalmers Port
Track, Indoor Track, Cross-Country: Keith Hamilton
Tennis: William B. Poore
Golf: Bob Gatlin
Rifle: Charles F. Coates, Jr.
Wrestling: To be Announced
Soccer: Frank Frolich

The Citadel is a member of the National Collegiate Athletic Association and the Southern Conference. The Southern Conference is made up of seven institutions: The Citadel, Davidson College, Furman University, University of Richmond, Virginia Military Institute, the College of William and Mary, and East Carolna Unversity. The Citadel sponsors twelve teams in intercollegiate athletics. These sports are football, basketball, wrestling, indoor track, baseball, outdoor track, rifle, golf, tennis, soccer, and cross-country.

Facilities for well-rounded development in athletics are provided for all cadets and are constantly improved as the program expands. Home football games are played in Johnson Hagood Memorial Stadium, which seats over 22,000 spectators. The Citadel Armory is used not only for varsity basketball but for intramural basketball and recreational games. The seating capacity for varsity basketball is approximately 4,000 with ample seating for all cadets in bleachers and seats surrounding the main court. Home baseball games are played at College Park Field, which is located northeast of the campus. The wrestlers have a large wrestling practice room which is located in the basement of Alumni Hall, and all official matches are held in the Armory. There are six well-kept, all-weather tennis courts on the campus for varsity tennis use and for the convenience of all cadets. Golf facilities are available to Citadel cadets at the local courses. Indoor and outdoor rifle ranges are available for varsity competition as well as for training and recreational use by all cadets. Willson Field, a large area on the

extreme north end of the campus, provides space not only for two practice football fields but also a quarter-mile track which has a 220-yard straight-away. Washington Light Infantry Field has been renovated and now has two full practice football areas, and half of a field for practice drills. Track and field events in official competition are held on Willson Field. It is also used for intramural activities when not in use by varsity teams.

All intercollegiate athletic teams are handled by experienced and competent coaches who take every precaution for the physical conditioning of the teams under their care. A carefully supervised training room is open all year for the care and treatment of athletes on all teams.

REQUIREMENTS FOR ADMISSION

Personal Requirements

An applicant for admission to The Citadel must:

—be a male, at least five feet in height, and physically qualified for R.O.T.C.

—be at least sixteen and less than twenty-one years of age at the time of his entrance.

—be unmarried. No married person will be admitted as a cadet. If a cadet marries, he will be discharged immediately.

— have no record of conviction of a criminal offense showing poor moral character.

—provide evidence from his school authorities and personal references that he is of good moral character and possesses the potential and the personality to conform to the ethical standards and the strict discipline of cadet life at The Citadel. The Citadel reserves the right to require of any applicant a written certificate to this effect signed by at least two graduates of The Citadel.

Educational Requirements

An applicant for admission to The Citadel must be a graduate of an accredited high school. This basic requirement for admission to the Freshman Class derives from the college admission requirements prescribed by the Southern Association of Colleges and Schools, of which The Citadel is a member. The standards of the Association require "the satisfactory completion of a four-year course of not less than fifteen units in a secondary school approved by a recognized accrediting agency, or in a secondary school that is a member of this Association, or the equivalent of such a course as shown by examination."

The required high school subjects are:

—four (4) units of English

—three (3) units of Mathematics, two (2) of which must be Algebra. For physical science and engineering majors, the third unit must be Plane Geometry.

—one (1) unit of History.

A student desiring a B.S. degree in Chemistry, engineering, mathematics, or physics must begin mathematics at The Citadel with Mathematics 131 (Analytic-Geometry and Calculus). It is strongly recommended that his preparatory background include four units of high school mathematics with at least one-half unit of trigonometry. Students may qualify for admission to Mathematics 131 by either of the following two methods:

(1) By earning a sufficiently high score on the College Entrance Examination Board's Achievement Test, Mathematics, Level I or II.

(2) By successfully completing either Mathematics 101 and 102 or Mathematics 119 at The Citadel.

If condition (2) is used it is suggested that the student should take the qualifying courses in the summer session of The Citadel before entering as a Freshman in order to avoid being behind in the four-year program of his choice.

A statement of the courses required each year in each department and a detailed description of the various courses will be found on pages 100 through 127.

Entrance Examinations

All candidates for admission to The Citadel are required to take the College Entrance Examination Board Scholastic Aptitude Test (SAT). The Mathematics Achievement Test is required for candidates majoring in engineering, chemistry, mathematics or physics. The Citadel strongly recommends that both the English Composition and the Mathematics Achievement Tests be taken by all applicants, because, in the event an applicant's SAT scores or high school grades are considered too low, these achievement tests may then be required.

In order to apply for these tests, the applicant must write directly to College Entrance Examinaiton Board, P. O. Box 592, Princeton, New Jersey, for its bulletin of Information and application blank. These tests are normally offered at locations throughout the United States and in some foreign countries in December, January, and March. An application to take these tests must be submitted to the College Entrance Examination Board at least one month prior to the date of the desired tests.

If an applicant lists The Citadel on his College Entrance Examination Board application as one of the colleges in which he is interested, his test scores will be sent to The Citadel approximately thirty days after the tests are taken. An applicant for admission to The Citadel should complete the required entrance examinations no later than with the January test.

Admission Procedure

Formal application for admission to The Citadel must be submitted by parent or guardian on the blank application form provided on request by The Registrar, The Citadel, Charleston, South Carolina 29409.

A non-refundable application fee of $10.00 must accompany each application.

Applications for admission should be submitted early in the prospective cadet's senior year in high school. In addition, the applicant should make early arrangements to take the required College Entrance Examination Board test, and to have those test scores sent to The Citadel. He is also responsible to have his high school record sent directly from his school.

The Citadel will advise the applicant of subsequent procedural actions as they are required.

A reservation fee of $50.00 is required of all new cadets accepted for enrollment (in the regular session at The Citadel), payable within

fifteen (15) days after notification of acceptance by the Registrar. Payment of this reservation fee will insure a place in the Corps of Cadets and will be applied to the first installment of regular college fees; it is not refundable to new cadets who cancel their reservation after June first. It should be emphasized that each applicant who is approved for enrollment must undergo a thorough physical examination, the results of which must be reported on the physical examination form provided by The Registrar at the time of notification of academic acceptance. This form also shows the immunization shot required by The Citadel. Final acceptance is contingent upon the results of this physical examination.

Applicant's Weekend Visit to The Citadel

If an applicant so desires, he may visit the campus for a weekend during the school year. For a nominal charge, the applicant eats his meals in the cadet dining hall and lives in barracks with the Corps of Cadets. He is thus able to observe cadet life in general and to discuss its specifics with both freshman and upper-class cadets. In addition, through the medium of an interview with an officer of the Commandant's staff, the applicant may further discuss his desire to attend The Citadel, and the college may achieve an evaluation of the applicant away from his home environment.

Details of this weekend visit program are sent to each applicant immediately following receipt of his formal application. It is requested that the applicant notify the Registrar, The Citadel, Charleston, S. C. 29409, at least two weeks prior to the specific weekend he chooses for his visit.

Admission Policy

The Citadel Committee on Admissions gives equal consideration to all applicants who meet the personal and educational requirements for admission. There is no discrimination because of race, creed, or color. No single factor controls acceptance of an applicant. The Citadel seeks to enroll well-rounded, mature students whose motivation and educational achievement indicate that they are prepared to do college work with reasonable probability of success. Therefore, the Committee on Admissions bases its decision concerning each applicant on an overall evaluation of the following:

a) High School Record (courses, grades, class standing). The high school record tends to indicate an applicant's motivation, study habits, and scope of interest thus permitting an evaluation of his educational potential and preparedness to do college work. Particular attention is given to the grades achieved in such college preparatory subjects as English, mathematics, science, history, and foreign languages.

b) College Entrance Examinaiton Board test scores. An applicant's test scores on the College Entrance Examination Board's Scholastic Aptitude Test and Achievement Tests receive considerable emphasis.

Although test scores represent only one factor in the determination of an applicant's acceptability, they tend to indicate his educational development with respect to his contemporaries and therefore they permit a reasonable evaluation of his actual preparedness and potential to do college work.

c) Recommendations.

The personal evaluation of an applicant by a high school official, normally the principal or the guidance counselor, must include a positive recommendation that the applicant is prepared, educationally and emotionally, to enter college. This recommendation is of great importance to the acceptance decision because it represents judgments on ability and maturity which derive from considerable experience with and observation of the applicant during his most formative years.

The recommendations of an applicant's personal references augment and reinforce the high school official's evaluation and are therefore indispensable. They provide the Committee on Admissions with information relative to the applicant's background personal characteristics and reputation, and provide additional pudgments of his readiness and suitability to enter college.

In general, The Citadel seeks to determine acceptability through a thorough evaluation of each applicant's character, maturity, motivation, readiness for college, amenability and obedience to authority, emotional stability and potential as a contributor to cadet life. Where any of these factors are in question, the college will obtain additional information by means of any of the following: interviews with the applicant; interviews with parents and/or members of his community; requiring the applicant to write a special report on such subjects as his goals in life, his reason for his choice of The Citadel and/or the reasons supporting his choice of major field of study; requiring the applicant to submit to a special test designed to examine in detail any aspect of the applicant's character or potential.

Advanced Placement and Credit

The Citadel awards advanced credit and advanced placement where appropriate to applicants who score four or five on Advanced Placement Examinations given by the Educational Testing Service in the eleven fields of study listed in the 1968-70 Course Descriptions in the College Entrance Examination Board's Advanced Placement Program. The examination paper of a candidate scoring three will be reviewed by The Citadel academic department head concerned with the field of study, and advanced placement may be given with or without credit.

Advanced placement may be granted upon recommendation of the academic department head concerned. His recommendation would be based upon evidence, usually derived from an interview with the entering cadet, of proper preparation and achievement to assure success in the advanced course. Qualified students will be allowed to bypass elementary or intermediate language courses. In general, those

who have had two years of foreign language in high school or the equivalent should be able to take intermediate courses (201-202 or 203-204). However, they have the right to start any language at the basic level (101-102) if they so desire. In all cases of advanced placement, no credit is awarded for the by-passed course or courses; electives will be required to make up for the by-passed semester hours.

Initial Acceptance and Withdrawals

New Cadets are admitted to the Corps of Cadets only in September but may commence their academic work in the summer. Veteran students may be admitted at the beginning of either semester or either summer term.

If a cadet finds it necessary to withdraw from The Citadel during the college year or does not wish to return to The Citadel the September following any college year, a written request for an honorable discharge must be sent by the parent or guardian to the Registrar.

If a veteran student finds it necessary to withdraw or not to return the following semester, he should submit a written request for a discharge to the Registrar.

The Citadel, The Military College of South Carolina, is one of six institutions of higher education supported by the State of South Carolina.

The cost of operation is underwritten through collection of fees from the students and appropriations made by the General Assembly of South Carolina. Non-residents are required by law to pay a larger portion of the cost of their education than is required of residents of South Carolina. This differential is $650.00.

Colonel J. F. Bosch, Jr., Dean of Fiscal Affairs and Comptroller, is the chief business and fiscal officer of the institution. Major Bailey M. Morrow, Assistant Comptroller and Treasurer, is responsible for the collection of monies due The Citadel. All correspondence concerning fees, installments and status of accounts should be directed to Major Bailey M. Morrow, Assistant Comptroller and Treasurer.

Fees

The fees shown below in the Schedule of Payments are required to be paid by all students. The college reserves the right at any time to adjust fees to meet the current cost of operation should it become necessary. Registration, tuition and college fees are not refundable. Auxiliary Service fee is refundable on a pro-rated basis.

Payments

Beginning with the freshman class of September 1970 and all subsequent classes thereafter, the four installment plan will be discontinued and one installment each semester will be instituted. This change was felt necessary as one step in combating the rising cost of making collections and bookkeeping. The installments are due and payable as shown in the schedule below. Bills for the regular academic year will be rendered to parents or guardians approximately one month prior to the date the installment is due. All remittances should be by money order or check, made payable to The Citadel and mailed to the Assistant Comptroller and Treasurer, The Citadel, Charleston, S. C. 29409.

Since summer and evening school fees are based upon the credit hours taken, it is impossible to pre-bill these fees. See page 78 for information on the summer and evening programs.

It is pointed out that the installment payment date is in advance of the date for reporting to school for registration. This advance payment date is necessary for the smooth functioning of the pre-registration procedure in effect at The Citadel.

In those instances where parents desire to finance the cost of their son's education on a monthly installment basis, arrangements for such plans may be made with either Education Funds, Inc., Howard Bldg. P. O. Box 4, Providence, Rhode Island, or The Tuition Plan of New Hampshire, Inc., Concord, New Hampshire 03301. Details of these plans may be secured by writing directly to these institutions. In any

event, if loans are received from these institutions or any other financial institution, arrangements should be made with the lending institution to have the payments received by The Citadel on the due dates specified in the schedule of payments.

Prepayment Plan

The Citadel, in conjunction with Education Funds, Incorporated, Funds Management, is offering a convenient monthly payment plan for those parents who desire to budget the annual cost of college fees in ten (10) monthly installments. Payment under this plan commences May 1, 1970 and any parent entering the program at a later date must make up the back payments. The cost for this budgeting plan is only $20.00. Each month you will receive a statement from Education Funds, Incorporated notifying you of the amount that is to be paid.

If, after entering the program, the student is awarded scholarship, or financial aid, this amount will be applied to your account and the necessary adjustment made. All refunds will be made according to the school's refund policy as stated in the catalogue. If a student does not register, all monies collected for that term will be refunded.

Persons wishing to participate in this program should apply to:

Education Funds, Incorporated,
Funds Management,
36 Wabash Street,
Chicago, Illinois. 60606

Late Payments

All college fees must be paid by the dates indicated in the schedule below. A penalty of $5.00 for the first day and $1.00 per day thereafter until all fees have been paid will be assessed each student for failure to pay any installment on the date it is due. Also failure to pay an installment or any part thereof subjects the cadet to being dropped from enrollment at The Citadel under the College Regulations.

Schedule of Payments for Freshmen Students

Date Due	South Carolina Residents	Out-of-State Residents
†Reservation Fee Fifteen Days After Notice of Acceptance	$ 50.00	$ 50.00
First Semester Fees - 9/1/70	$1,384.75§	$1,709.75
Second Semester Fees - 1/18/71	799.75	1,124.75
	$2,184.50	$2,834.50

† See footnote one on page 66.
§ See footnote two on page 66.

Schedule of Payments for South Carolina Residents

Due Date	*Sophomores*	*Juniors*	*Seniors*
†Reservation Fee:			
On or Before July 1	$ 50.00	$ 50.00	$ 50.00
First Semester Fees:			
1st Installment - 9/1/70	$ 579.25	$ 579.25	$ 579.25
2nd Installment - 11/16/70	350.50	350.50	350.50
Total First Semester Fees	$ 929.75	$ 929.75	$ 929.75
Second Semester Fees:			
3rd Installment - 1/18/71	$ 449.25	$ 424.25	$ 374.25
4th Installment - 4/1/71	350.50	350.50	350.50
Total Second Semester Fees:	$ 799.75	$ 774.75	$ 724.75
Total Academic Year	$1,729.50	$1,704.50	$1,654.50

† See footnote one on page 66.

Schedule of Payments for Out-of-State Residents

Due Date	*Sophomores*	*Juniors*	*Seniors*
†Reservation Fee:			
On or Before July 1	$ 50.00	$ 50.00	$ 50.00
First Semester Fees:			
1st Installment - 9/1/70	$ 741.75	$ 741.75	$ 741.75
2nd Installment - 11/16/70	513.00	513.00	513.00
Total First Semester Fees	$1,254.75	$1,254.75	$1,254.75
Second Semester Fees:			
3rd Installment - 1/18/71	$ 611.75	$ 586.75	$ 536.75
4th Installment - 4/1/71	513.00	513.00	513.00
Total Second Semester Fees:	$1,124.75	$1,099.75	$1,049.75
Total Academic Year	$2,379.50	$2,354.50	$2,304.50

† See footnote one on page 66.

Summary of Expenses for South Carolina Students

Fees:	*Freshmen*	*Sophomores*	*Juniors*	*Seniors*
Registration Fee	$ 10.00	$ 10.00	$ 10.00	$ 10.00
Tuition Fee	125.00	125.00	125.00	125.00
College Fee	422.00	422.00	422.00	422.00
Auxiliary Services	892.50	892.50	892.50	892.50
Total Fees	$1449.50	$1449.50	$1449.50	$1449.50

Deposits:				
Deposit for Books, Supplies, Uniforms and Accessories	$ 725.00§	$ 280.00	$ 255.00	$ 205.00
Breakage	10.00	—	—	—
Total Deposits	$ 735.00	$ 280.00	$ 255.00	$ 205.00
Total Expenses for South Carolina Students	$2184.50	$1729.50	$1704.50	$1654.50

§ See footnote two.

Summary of Expenses for Out-of-State Students

Fees:	*Freshmen*	*Sophomores*	*Juniors*	*Seniors*
Registration Fee	$ 10.00	$ 10.00	$ 10.00	$ 10.00
Tuition Fee	375.00	375.00	375.00	375.00
College Fee	822.00	822.00	822.00	822.00
Auxiliary Services	892.50	892.50	892.50	892.50
Total Fees	$2099.50	$2099.50	$2099.50	$2099.50
Deposits:				
Deposit for Books, Supplies, Uniforms and Accessories	$ 725.00§	$ 280.00	$ 255.00	$ 205.00
Breakage	10.00	—	—	—
Total Deposits	$ 735.00	$ 280.00	$ 255.00	$ 205.00
Total Expenses for Out-of-State Students	$2834.50	$2379.50	$2354.50	$2304.50

§ See footnote two.

Footnotes on Schedules of Payments and Expenses

† 1. The reservation fee of $50.00 will be credited to the first installment of the first semester.

§ 2. An additional deposit of $60.00 is required of freshman students who elect engineering drawing.

Explanation of Fees

Reservation Fee: A reservation fee of $50.00 is required of all cadets. This fee is not an additional charge but is an advance payment toward the fees due for the Fall Semester. It assures a cadet a place in the Corps of Cadets and barracks for the following September.

All new cadets are required to pay this fee within fifteen days after notice of acceptance has been received from the Registrar.

A cadet currently enrolled who plans to continue his education at The Citadel is also required to pay the reservation fee not later than July 1 for the semester beginning in September. If this fee is not paid

by July 1, The Citadel is in no way obligated to permit him to continue his education at The Citadel.

The reservation fee will be refunded to old students who notify the Registrar in writing not later than July 1 to cancel their reservations at The Citadel. After July 1 but prior to registration for the Fall Semester, this fee will be refunded only to those upperclassmen (sophomores, juniors, and seniors) who have been dropped from enrollment at The Citadel due to academic deficiencies or other causes.

Those students who complete registration for the fall semester will receive credit on the first installment for the reservation fee previously paid.

Tuition — The Board of Visitors of The Citadel has established the following tuition fees:

South Carolina Students — For all students whose guardians or parents reside in South Carolina the tuition fee has been established at $125.00 per academic year or $62.50 per semester.

Out-of-State Students — All students whose guardians or parents are non-residents of South Carolina will pay an out-of-state tuition fee.

The out-of-state tuition fee has been esatblished at $375.00 per academic year or $187.50 per semester.

This fee is not refundable.

College Fee — A college fee of $422.00 is assessed South Carolina students and $822.00 for out-of-state students per academic year. This fee is used in the support of the library, general overhead and maintenance of the college, and student activities. That portion of the fee going to the student activities is used in the support of student publications and organizations such as The Sphinx, cadet annual; The Brigadier, cadet newspaper; The Shako, cadet literary magazine; The Guidon, and information and orientation handbook; religious activities; social functions, including dances; intramural program, and athletics. That portion of the fee for athletics is not an admission fee to athletic contests, since students are admitted to all athletic games free of charge. The College Fee is not refundable.

Auxiliary Services Fee. — A fee of $892.50 per academic year is assessed each student. This fee is used to cover room, board, laundry, normal hospital care, and hair cuts. For the purpose of loan applications, room and board should be shown as $675.00 with the balance of $217.50 covering laundry, hospital and hair cuts.

Due to many uncontrollable factors, the college reserves the right to increase this fee at any time to meet current increases in the cost of operation. This fee is refundable on a pro-rated basis upon withdrawal from school.

Breakage. — A $10.00 deposit will be maintained by all cadets enrolled at The Citadel. When there is insufficient money in the cadet's

account to cover the cost of damages to buildings, rooms, equipment, or loss of R.O.T.C. manuals and government property, this deposit will be used. This deposit is refundable after graduation or withdrawal from The Citadel.

Deposit for Books, Supplies, Uniforms and Accessories. — Each cadet is required to deposit funds to his account to cover the cost of books, supplies, uniforms, accessories, alterations to uniforms, purchase of dry cleaning and pressing tickets, laboratory fees, engineering drawing equipment and supplies and other miscellaneous expenses relevant to his studies or attendance at The Citadel. The amount expended by each student varies, according to the individual's needs. The amount of the deposit has been based upon the average needs. In most cases this amount is ample. However, if the needs of a cadet should exceed the deposit, additional funds will have to be deposited to his account.

The required deposits are as follows:

Freshmen	$725.00
Additional deposit for freshmen engineering students. (Students who elect engineering drawing will be rendered a supplementary bill for this deposit to cover the purchase of drawing instruments and supplies.)	$ 60.00
Sophomores	$280.00
Juniors	$255.00
Seniors	$205.00

Uniforms. — All cadets are required to wear The Citadel uniform which is issued by the college. New cadets should not bring a supply of civilian clothes other than those which are worn upon reporting to the college as they are not permitted to wear civilian clothes except during authorized furloughs.

Cost of uniforms should not be considered as an educational expense but rather a clothing expense which is incidental to attending any college. With proper care, the uniform should last for several years. Of course, the requirements during the subsequent years will depend on the manner in which the cadet has cared for his uniform. The overall cost of the uniform should not exceed that which would be incurred in purchasing clothes to attend a civilian college.

The woolen uniforms issued to cadets are custom-made for The Citadel. Once the uniforms have been fitted and issued to a cadet the entire cost will be charged to him.

Since the full dress uniform is tailor-made to the measurements of each cadet after enrolling at The Citadel, those cadets withdrawing from the school will be charged a cancellation fee of $10.00 for can-

celling the purchase of the full dress uniform during its manufacture. The deadline for cancelling the purchase of the full dress uniform is November 15, 1970. After this date no cancellation will be accepted and the cadet will be charged the entire cost of the full dress uniform.

The cost of articles and uniforms issued to the freshman during the 1969-70 academic year was as follows:

Quantity	*Article*	*Cost*
1	Bed Spread, Citadel	$ 9.45
1	Blanket, Citadel	8.70
1	Blouse, dress wool	*60.40
1	Blouse, Full Dress, wool	*78.70
1	Cap, dress	9.20
1	Field Cap	2.60
1	Cap, white with covers	7.50
1	Coat, Overcoat, wool	*67.55
1	Coat, rain	27.80
2	Coat, white and accessories	*43.95
4	Cuffs, pairs, @ $.60	2.40
2	Covers, mattress, @ $3.05	6.10
2	Gloves, pairs, dance, @ $.85	1.70
6	Gloves, pairs, drill, @ $1.15	6.90
1	Gloves, pair, leather	4.90
1	Jacket, grey	*19.75
2	Pads, mattress, @ $3.55	7.10
1	Muffler	1.15
1	Shako, with pompon, chain, etc.	15.50
6	Shirts, grey cotton, @ $4.00	24.00
6	Shirts, grey cotton, short sleeve, @ $3.30	19.80
2	Shirts, athletic, @ $1.35	2.70
1	Shirt, knitted sport	2.30
2	Shoetrees, pair, @ $2.05	4.10
2	Shorts, athletic, @ $1.25	2.50
1	Suit, sweat	3.80
10	Trousers, grey cotton, @ 4.05	40.50
4	Trousers, white, full dress, @ $8.95	*35.80
2	Trousers, dress, wool, @ $25.40	*50.80
1	Trousers, Full Dress, wool	*25.70
3	Laundry Bags @ $.90	2.70
1	Bathrobe	6.80
		$602.85

Miscellaneous Items:
1 Belt w/2 bkle.; 2 Belt Tips; 8 Collars, White; 1 Cover Cap, rain; 1 Cuff Links, pair; 2 Letters, company; Name Tags; 2 Numerals, class; 2 Neckties; 1 Plate, breast; 1 Plate, waist;

1 Supply Kit; 1 Suspenders, white; 1 T Pins, box; 1 Webbing, roll; Rentals, cartridge box or music pouch; 10 Hangers; 1 Lock; 1 Desk Pad, complete; 1 Paper, white, ream; 1 Paper, yellow, ream	29.80
Total	$632.65
S. C. Sales Tax	25.31
	$657.96

* Cost during the 1970-71 academic year.

The above prices were in effect during the 1969-70 academic year and are subject to changes in accordance with the contract prices at the time of purchase by the cadets. Extra shirts, trousers, or other articles of uniform in excess of the above quantities are not included in the required deposit. Additional deposits will have to be made if extra shirts, trousers, or other articles of uniform are desired.

Cadets in the Second Class (Juniors) will be issued four cotton shirts during the first semester.

In order to keep the appearance of the Corps of Cadets at the highest level, an inspection will be made of the articles of uniform of members of the third (sophomores), second (juniors), and first (seniors) classes. If the uniforms do not meet the minimum requirements of appearance, the individual will be required to purchase a replacement for the unserviceable item of uniform. In order to keep the cost to a minimum, a new or used uniform may be purchased depending upon the desires of the cadet.

Diploma Fee. — The charge for the diploma is $10.00.

Transcript Fee. — Official transcripts of scholastic records will be furnished upon request. There is no charge for the initial transcript, but a fee of $1.00 is charged on all subsequent ones. Remittances for transcripts should be made payable to The Citadel. The payment should accompany the application for the transcript and should be mailed directly to the Registrar.

Laboratory Fee. — A laboratory fee of $10.00 a semester is charged students taking courses involving laboratory work in biology, chemistry, civil engineering, electrical engineering, geology, modern languages, and physics. These laboratory fees are used to cover the added expense of supplies and costly equipment used in the teaching of these courses. This fee is not collected but is included in the estimated deposit for books and supplies, and is chargable against the deposit.

A laboratory fee of $5.00 a semester is charged to students of the junior and senior classes majoring in physical education. A fee of $2.00 a semester is charged to students in Business Statistics and Senior Accounting.

A laboratory fee of $10.00 is charged to students taking any computer course.

All students are required to participate in the physical fitness and intramural programs. To support these programs the following laboratory fees are charged each semester: freshmen $5.00, sophomores $2.50, juniors $1.25, seniors $1.25.

Refunds

No refunds for registration, tuition, and college fees will be made when a cadet withdraws during the period for which the fees have been paid. The auxiliary service fee will be refunded on a pro-rata basis except the cost of hair cut tickets; refunds will be made as follows:

Refunds for unused hair cut tickets will be made only to cadets withdrawing or graduating from The Citadel. All refunds are made through The Citadel Canteen upon presentation of the unused tickets. A freshman upon withdrawing during the school year will be refunded the value of the unused tickets issued to him during the school year. Upon graduation a senior will be permitted a refund on his unused hair cut tickets up to ten per cent of the number of tickets issued to him during his attendance at The Citadel.

Refunds will be mailed approximately 30 days after discharge or graduation.

If a cadet should withdraw prior to the date on which an installment is due, the amount of any installment paid in advance will be refunded. On the other hand, a cadet who is enrolled on the date on which an installment is due, the entire amount of the installment will be due and will not be refunded except for the auxiliary service fee which will be refunded on a pro-rata basis.

All unused portion of the deposit to the cadet's account for books, supplies, uniforms and accessories will be refunded. Since this deposit is estimated to cover the needs of the cadet for such purchases during the entire academic year, it should not be expected that the school refund this money during the year to the cadet for his personal needs.

The unexpended balance of the deposit will be returned upon request at the close of the academic year; otherwise, it will be held to the cadet's credit until the next academic year, or until he withdraws from The Citadel.

Monthly Statements of Cadet's Account

A monthly statement is furnished each cadet. It is encumbent upon the cadet to verify each charge or credit made to his account. After verification of the charges and credits has been made, the statement should be forwarded to his parent or guardian for their information. If the cadet's account is overdrawn, he should coordinate with the Treasurer's office to determine if additional deposit should be made.

Additional Information

Unsatisfactory Accounts. — When a cadet's account is in an unsatisfactory condition, no honorable discharge will be made, no diploma will be awarded, and no transcript of credits will be provided until a satisfactory settlement of the account has been made.

Pocket Money. — The college does not handle money accounts. All allowances for pocket money should be sent directly to the cadet. No estimate is made of this requirement, for the amount varies among the cadets and can best be determined by the cadet and his parents.

Cadets who receive substantial allowances for their personal needs should deposit this money in The Citadel Depository which is maintained for the accommodation and convenience of the cadets. This depository is located in the Treasurer's Office in Bond Hall.

Clothing and Bedding

All cadets are required to furnish their own bedclothes except a bedspread and blanket which will be issued to each cadet. Both the bedspread and the blanket are in Citadel colors and have The Citadel seal imprinted thereon. These items can be used after graduation on single beds.

Beds and mattresses are provided by the college, but pillows are not. Two mattress covers will be issued at cost to each cadet. Cadets *must* come provided with the following articles:

Three pajamas
Twelve white tee shirts and twelve short drawers
Twelve pairs of black socks
Four pairs of white athletic socks
One pair white tennis shoes
Ten white towels
One pillow
Three white pillow cases
Four white sheets for single bed
Twelve white handkerchiefs
One pair bedroom slippers or shower shoes
Two pairs, plain toe black oxfords shoes (with rubber heels)
One Army style blanket for single bed
Toilet articles

Since the school does not furnish bed linens, it is advisable that each cadet who ships his belongings to The Citadel bring with him two sheets, one pillow case, and one pillow for his use until he is able to get access to his belongings.

New cadets are advised to break in their cadet uniform shoes at least three weeks prior to reporting to The Citadel.

Before the opening of the first semester a new cadet is assigned an identification number, which he retains as long as he remains at The Citadel. This five-digit number will be used by the cadet as an identification number and as his laundry number. All clothing should be marked with his name and full initials, as well as the identification number, as follows: sheets, towels, and handkerchiefs, in the corner; pillow cases, in the corner at open end; collars, on inside near center;

shirts, on bands at back of neck; socks, on leg near top; other articles, where most practicable.

Luggage

It is advisable to bring inexpensive trunks and suitcases since it is not permissible to retain them in the cadet's room. Luggage must be stored in a warehouse provided for such at the risk of the owner.

Luggage stored in the warehouse should be removed by the cadet upon withdrawing or graduating from The Citadel. If it is necessary to ship luggage home, shipment will be C.O.D. The Citadel reserves the right to dispose of all unclaimed luggage remaining in the warehouse one year after a cadet has withdrawn or graduated.

Luggage sent by commercial transportation should be clearly identified with name of the cadet and shipped to:

The Citadel
Supply and Property Officer
Central Warehouse
Charleston, S. C. 29409

The Supply and Property Officer should be notified in advance of the shipment. Upon receipt, the luggage will be placed in Cadet's barracks.

Accommodations for Cadets During Holidays

Cadets who cannot go to their homes during the Christmas and Easter holidays may remain on the campus and occupy the visiting teams' dormitory. The barracks and the dining hall will be closed during vacations.

Employment

The time of a cadet at The Citadel is so taken up with his duties that there is no opportunity for outside employment for the purpose of financial assistance. However, there are a limited number of part-time jobs available from time to time with various campus activities. These jobs are not of a substantial nature which can be relied upon to pay a cadet's college fees. To be eligible for such work a cadet must be an upper classman and must be proficient in both his academic work and conduct.

Hospital

The hospital facilities at The Citadel are excellent, and all ordinary cases of sickness are treated by the surgeon and the nurses of the college without expense to the parent. Surgical cases requiring the removal of a cadet to an infirmary in the city, services of a special nurse in the college hospital, and special treatment of eyes, ears, teeth, etc., must be at the expense of the parents or guardian.

The cost of special medical supplies or prescriptions will be charged to the student account.

Hospital Group Insurance

The Citadel has made arrangements with a private Insurance Com-

pany for a Group Hospitalization Program available to all cadets on a voluntary basis. The particulars of this program are provided the parents and/or guardians prior to each school year. This program is approved by The Citadel and operated by the private insurance agency.

Army R.O.T.C. Allowances

Students formally enrolled (see page 180 for particulars) in Military Science I and II are paid by the government $32.00 per semester as a uniform allowance. Fourth classmen (freshmen) and third classmen (sophomores) must be enrolled at least through the sixth week to receive this allawance. Students formally enrolled in the advanced course are paid $54.50 per semester as a uniform allowance. The above uniform allowances are not paid directly to the students but are credited to the students' account when received from the Army.

In addition to the uniform allowance a retainer pay of approximately $50.00 per month is paid directly to those students formally enrolled in the advanced course.

Students formally enrolled in Army R.O.T.C. must attend summer camp between their junior and senior years. At this camp students receive the pay rate of $160.50 per month while attending, plus travel pay to and from camp computed at a rate of six cents per mile. During the camp period the retainer pay is not paid.

Summary of Estimated Army R.O.T.C. Allowances

Fourth Class year (Freshmen) (formally enrolled):	
Commutation of Uniforms Allowance	$ 64.00
TOTAL	$ 64.00
Third Class Year (Sophomores) (formally enrolled):	
Commutation of Uniforms Allowance	$ 64.00
TOTAL	$ 64.00
Second Class Year (Juniors) (formally enrolled):	
Commutation of Uniform Allowance	$109.00
*Retainer Pay (estimate)	$500.00
TOTAL	$609.00
First Class Year (Seniors) (formally enrolled);	
Commutation of Uniform Allowance	$109.00
*Retainer Pay (estimate)	$500.00
TOTAL	$609.00
Summer Camp (six weeks) (taxable)	$240.75

*Retainer Pay: Paid at the rate of $50.00 per month not to exceed 595 days (Paid only while under contract).

Summer Camp: $160.50 per month.

Air Force R.O.T.C. Allowances

Students formally enrolled (see page 124 for particulars) in Aerospace Studies I, II, III, and IV, are paid by the government each semester. The cadet must be enrolled in the institution at the time the request for payment is submitted (normally within a 60 day period after classes commence at the beginning of each semester). Uniform commutation allowance is not paid directly to the student but is credited to the student's account when received from the Air Force.

In addition to the uniform allowance subsistence allowance of $50.00 per month is paid directly to those students formally enrolled in the Professional Officer Course (Junior and Senior years).

Students formally enrolled in Air Force R.O.T.C. must attend a summer camp between their junior and senior years. At this camp students receive the pay rate of approximately $141.82 per month while attending, plus travel pay to and from camp computed at a rate of six cents per mile. During the camp period subsistence allowance is not paid.

Summary of Estimated Air Force R.O.T.C. Allowances

Fourth Class year (Freshmen) (formally enrolled):	
Commutation of Uniform Allowance	$ 60.00
TOTAL	$ 60.00
Third Class Year (Sophomores) (formally enrolled):	
Commutation of Uniform Allowance	$ 60.00
TOTAL	$ 60.00
Second Class year (Juniors) (Members of the POC	
Commutation of Uniform Allowance	$ 97.00
*Subsistence Allowance (Approximately)	$475.00
TOTAL	$572.00
First Class Year (Seniors) (Members of the POC)	
Commutation of Uniform Allowance	$ 97.00
Subsistence Allowance (Approximately)	$475.00
TOTAL	$572.00
SUMMER CAMP:	
Air Force ROTC Cadets (four weeks) (taxable)	$141.82
Travel—six cents a mile to and from camp.	

*Subsistence allowance: Paid at $50.00 per month not to exceed 20 months. (Paid only while under contract).

Payments Under the Army and Air Force Scholarship Programs

Under the Army and Air Force Scholarship Programs The Citadel receives directly from the Federal Government payment for the registration fee, tuition fee, college fees and hospital fee valued at $602.00 for South Carolina students and $1,152.00 for out-of-state students.

The schedule of payments of these R.O.T.C. Scholarship students is as follows:

South Carolina Students

	Total	Amount Paid By Government	Amount Paid By Student
FRESHMEN			
First Installment	$1384.75	$ 301.00	$1083.75
Second Installment	799.75	301.00	498.75
Total	$2184.50	$ 602.00	$1582.50
SOPHOMORES			
First Installment	$ 579.25	$ 153.00	$ 426.25
Second Installment	350.50	148.00	202.50
Third Installment	449.25	153.00	296.25
Fourth Installment	350.50	148.00	202.50
Total	$1729.50	$ 602.00	$1127.50
JUNIORS			
First Installment	$ 579.25	$ 153.00	$ 426.25
Second Installment	350.50	148.00	202.50
Third Installment	424.25	153.00	271.25
Fourth Installment	350.50	148.00	202.50
Total	$1704.50	$ 602.00	$1102.50
SENIORS			
First Installment	$ 579.25	$ 153.00	$ 426.25
Second Installment	350.50	148.00	202.50
Third Installment	374.25	153.00	221.25
Fourth Installment	350.50	148.00	202.50
Total	$1654.50	$ 602.00	$1052.50

Out-of-State Students

	Total	Amount Paid By Government	Amount Paid By Student
FRESHMEN			
First Installment	$1709.75	$ 626.00	$1083.75
Second Installment	1124.75	626.00	498.75
Total	$2834.50	$1252.00	$1582.50
SOPHOMORES			
First Installment	$ 741.75	$ 315.50	$ 426.25
Second Installment	513.00	310.50	202.50
Third Installment	611.75	315.50	296.25
Fourth Installment	513.00	310.50	202.50
Total	$2379.50	$1252.00	$1127.50

JUNIORS			
First Installment	$ 741.75	$ 315.50	$ 426.25
Second Installment	513.00	310.50	202.50
Third Installment	586.75	315.50	271.25
Fourth Installment	513.00	310.50	202.50
Total	$2354.50	$1252.00	$1102.50
SENIORS			
First Installment	$ 741.75	$ 315.50	$ 426.25
Second Installment	513.00	310.50	202.50
Third Installment	536.75	315.50	221.25
Fourth Installment	513.00	310.50	202.50
Total	$2304.50	$1252.00	$1052.50

Additional items of cost are paid under the R.O.T.C. Scholarship Program as follows: when applicable laboratory fees are billed to the Government and when the money has been received, it is credited to cadet's account. Both the Army and the Air Force pay up to $50.00 each semester for books purchased. The government is billed and the payment for the books purchased is made directly to the cadet. The subsistance allowance of $50.00 per month is also paid directly to the cadet by both the Army and Air Force. Since these allowances are paid directly to the cadet, deductions cannot be allowed against the payments due The Citadel for board or book deposits included in the Schedule of Payments.

Any excess funds in a cadet's account which has been generated by credits from the R.O.T.C. Scholarship may be refunded to the parent upon request, or it may be left toward payment of fees for the next year, or any excess purchases that may be needed.

Special and Veteran Students

Certain cadets who have completed their four years of military requirements but lack a few hours of credit for graduation upon request may be granted the privilege of completing their work at The Citadel, as Special Students. Certified veterans are also permitted to attend as day students.

The schedule of payment for both Special and veteran students is as follows:

Schedule of Payments for South Carolina Students

FEES:		Payment Due 9/1/70	Payment Due 11/16/70	Payment Due 1/18/71	Payment Due 4/1/71
Registration Fee	$ 10.00	$ 5.00	$	$ 5.00	$
Tuition	125.00	31.25	31.25	31.25	31.25
College Fee	422.00	105.50	105.50	105.50	105.50
Book Deposit	125.00	62.50		62.50	
Total	$682.00	$204.25	$136.75	$204.25	$136.75

Schedule of Payments for Out-of-State Students

FEES:		Payment Due 9/1/70	Payment Due 11/16/70	Payment Due 1/18/71	Payment Due 4/1/71
Registration Fee	$ 10.00	$ 5.00	$	$ 5.00	$
Tuition	375.00	93.75	93.75	93.75	93.75
College Fees	822.00	205.50	205.50	205.50	205.50
Book Deposit	125.00	62.50		62.50	
Total	$1,332.00	$366.75	$299.25	$366.75	$299.25

Summer Session

A summer session is conducted for students who wish to accelerate their work or to make up conditions or failures.

The summer session must be self-supporting, and the same fees must be charged to both South Carolina and out-of-state students. Fees for the summer session are as follows:

	First Term	*Second Term*
Tuition—$18 per semester credit hour	.....	.....
Summer Term Fee	$ 20.00	$ 20.00
Room, Board and Laundry	151.50	126.25
Laboratory—for laboratory courses in biology, chemistry and physics	10.00	10.00

During the summer session all purchases of books and supplies will be on a cash basis. There will be no charging to the student's account since no book or supply deposits will be collected.

It is pointed out that bills for the summer session will not be sent to the parents by the Comptroller. It is impossible for the Comptroller to compute these bills since the tuition fee is based on the number of credit hours of work which is scheduled by the student. The student should come supplied with sufficient cash to take care of his fees for the summer session. Details of the Summer School Program may be had by obtaining a copy of the Summer School Bulletin from the Registrar.

EVENING PROGRAM

The Citadel has established an evening program of college courses. This program is designed to meet the needs of individuals who are interested in continuing their college education, who need more formal education, or who desire education for the purpose of broadening their cultural, business, professional, or avocational interests.

The program maintains the same academic standards that prevail in the regular program. All courses carry full college credits. The content of all courses is the same as that presented during the regular college session. Courses are under the jurisdiction of the regular academic department heads.

High school graduates and present or former students in good standing with an accredited institution of higher learning are eligible for admission to the evening program.

A tuition fee of $20 per semester hour is charged for all credit courses. The fee for auditing a course is $10 a semester hour. A laboratory fee of $10 per semester is charged for all science courses which have laboratory periods and for language courses using the language laboratory.

Courses will be offered during two semesters. The fall semester is from September to January and the spring semester, January to May.

FINANCIAL AID

Scholarships

Beginning with the fall term of 1970, several Citadel Scholarships will be available. Each year some of these are given to cadets entering The Citadel for the first time, and others are awarded to cadets presently in the college, based on accomplishments in the Corps both academically and militarily. The scholarships listed below fall under four categories:

Category I — Authorized by the Scholarship Board of Trustees of the Board of Visitors and selected by The Citadel Scholarship Committee.

Category II — Authorized by the Scholarship Board of Trustees of Association of Citadel Men and selected by The Citadel Scholarship Committee.

Category III — Authorized by the President of the College and selected by The Citadel Scholarship Committee.

Category IV — Given by individuals or companies directly to recipients without any selection by The Citadel Scholarship Committee.

The Citadel assumes the responsibility for awards given under the first three categories. Listed below are some of the current scholarships:

Category I

The Joseph D. Aiken Scholarships cover all expenses for the first three years and are supported by a trust fund made possible by a bequest of the late Joseph D. Aiken. It is anticipated that several scholarships will be available each year, but they are limited to applicants from the New England states with some preference being given Rhode Island and Connecticut residents.

The Major James W. Ayers Scholarship is in memory of Major Ayers, Class of 1957, who lost his life in the service of his country in Vietnam. It is given to an entering freshman, with preference to those interested in becoming a member of the United States Marine Corps upon graduation. The value is $400 a year for four years.

Baruch Scholarships, with a value of $400 each for one year, were inaugurated from the income of a fund donated to The Citadel by Mr. Bernard Baruch.

The Alton H. Bryant Memorial Scholarship is worth $800 a year for four years. It is in memory of Alton H. Bryant, a graduate of the Class of 1940, who lost his life in the service of his country. Applicants are limited to residents of Orangeburg County, South Carolina.

The Richard P. Cardwell Scholarship was established by General and Mrs. Eugene F. Cardwell in memory of their son, Cadet Richard P.

Cardwell, a member of the Class of 1957. It is given in alternate years to a member of the sophomore class and has a value of $400 a year for one year.

The Carrigg Scholarships were established by a bequest to The Citadel and have a value of $800 a year for four years.

The Frank W. Cayce Memorial Scholarships are four-year scholarships and pay $800 per year. These scholarships were made possible by his grandmother, the late Mrs. Zulale J. Dowling, who bequeathed to The Citadel her entire estate for the purpose of establishing an educational scholarship fund in memory of her grandson, Cadet Frank W. Cayce.

The Crouch-Lee Scholarship has a present value of $400 a year for four years. The James R. Crouch award was founded in 1925 by the late James R. Crouch of Greenville, South Carolina. The William States Lee Scholarship was founded the same year by the late William States Lee of Charlotte, North Carolina. The deeds provided that the beneficiary shall be limited to residents of South Carolina.

The Daniel Scholarships are derived from the income of a fund donated to The Citadel by R. Hugh Daniel and his brother, the late Charles E. Daniel. These scholarships range in value from $400 for one year to all expenses for four years.

The Thomas Holland Evans Memorial Scholarship was established by Mr. and Mrs. Thomas Evans in memory of their son, Lieutenant Thomas Holland Evans, Class of 1968, who lost his life while in the service of his country. It is given to an entering feshman, with financial need as a major requisite. It has a value of $400 per year for four years.

The Toney B. Jackson Scholarship, established by Toney B. Jackson of the Class of 1915, is given in alternate years to a member of the sophomore class and has a value of $400 a year for one year.

The Freddie Levine Scholarship was established from funds contributed by friends of Lieutenant Freddie Levine, who died in the service of his country. It pays $500 a year for four years.

The Robert F. McCrackan Scholarship has a value of $250 a year for four years and was established by a bequest in the will of Mr. Walter B. Metts, Class of 1903, honoring his classmate, Mr. McCrackan.

The Major General Harry K. Pickett Memorial Scholarships are supported from a fund made possible by a bequest of the late General Pickett, USMC, Ret., Class of 1911. These scholarships range in value from $800 a year for four years to all expenses for four years. They are awarded to young men of high moral character and citizenship with outstanding high school records and financial need, who are either citizens of the State of South Carolina or sons of United States Marines.

The Captain Anthony G. Prior Scholarship was established in

memory of Captain Prior, Class of 1964, who lost his life while in the serivce of his country in Vietnam. It is awarded to a needy young man with a strong desire for a military career. The value is $400 a year for four years.

The Edgar A. Terrell Scholarship is worth $800 a year for four years. It was made possible by a donation from Edgar A. Terrell, Class of 1915, and is limited to candidates from Mecklenburg County, North Carolina, or, in case there is no qualified candidate, to the geographical boundary of the State of North Carolina.

The James Ripley Westmoreland Scholarship has a value of $400 a year for four years. This scholarship is to assist worthy South Carolina young men who are in need of financial assistance to obtain a college education. This scholarship is in memory of Colonel James Ripley Westmoreland, a graduate of the Class of 1900, who served as Chairman and a member of the Board of Visitors for many years.

Category II

Association of Citadel Men Scholarships.—The Association of Citadel Men maintains several scholarships in the amount of $200 each. The scholarships are awarded for one year only to both entering cadets and upperclassmen.

The Oliver J. Bond Scholarship is supported by the income from a trust fund established by alumni as a memorial to the late Colonel Oliver J. Bond, President of The Citadel, 1908-1931. The present value is $400 a year for four years.

The Mark Clark Scholarship is $800 a year for four years, derived from an income made possible by General Mark W. Clark, President-Emeritus of The Citadel.

The Star of the West Scholarships were awarded for the first time in 1952. They cover all college expenses and are supported by the income from an anonymous trust fund. These scholarships are available only to students of outstanding ability and attainment without reference to financial need or geographical limitations.

The Summerall Scholarship is supported by the income from a trust fund established by alumni as a memorial to the late General Charles Pelot Summerall, President of The Citadel, 1931-53. This scholarship is worth $800 a year for four years.

Category III

The W. W. Benson Scholarship pays all expenses; it is named in honor of the late Major W. W. Benson, Class of 1907, and is supported by his friends from Greenwood County, South Carolina.

Cadet Insurance Aid Plan consists of several scholarships maintained by the Cadet Insurance Aid Plan from revenue derived from the dividends of life insurance policies voluntarily purchased by members of graduating classes since 1953.

The Renie Clark Scholarship is $1000 a year and awarded each year to a member of the senior class who best exemplified the traits Mrs. Clark demonstrated in assisting students to adjust to cadet life. This scholarship is a memorial to Mrs. Mark W. Clark. who was the first lady of The Citadel for more than eleven years.

The Exchange Club of Charleston Scholarship of $1000 is given each year to an outstanding cadet in the Corps from the Charleston area.

The First Field Artillery Brigade, A.E.F., and the *Fifth Field Artillery Scholarships* cover all expenses at The Citadel for four years. They were established in 1934 by Colonel Robert R. McCormick of Chicago and are limited to candidates from the State of Illinois.

Greenville-Piedmont Citadel Club Scholarship, with a value of $300 a year, is given annually to an outstanding young man from the Greenville area.

The B. Calhoun Hipp Scholarship has a value of $500 per year and is awarded annually to a young man from the Greenville area.

Thomas Jefferson Political Science Scholarship has a value of $300 and is awarded each year to an outstanding senior majoring in political science. This scholarship is awarded by the National Society, Southern Dames of America.

The P. P. Leventis Scholarship is worth $1,000 per year for four years. This scholarship is supported by the income from a trust fund as a memorial to the late P. P. Leventis, Sr. of Charleston. This scholarship is available to students of outstanding leadership ability, without reference to financial need or geographical limitations.

The Broadus R. Littlejohn Scholarship was established in 1963 by Broadus R. Littlejohn, Jr., Class of 1949. in honor of his father. It pays $500 a year for four years.

The Orphanage Fund Committee Scholarships, awarded for the first time in 1959, cover all college expenses for four years. The recipients are limited to high school seniors who are orphans. The Orphanage Fund Committee was started by the Corps of Cadets in 1952 for the purpose of fulfilling certain needs of the children living in the orphanages of Charleston. Excess donations within the Corps of Cadets have resulted in some of the money being set aside for these scholarships.

President's Honorary Scholarships. Each year General Hugh P. Harris gives several scholarships to outstanding high school graduates and outstanding members of the current junior, sophomore, and freshman classes of The Citadel. Each scholarship has a value of $200.

The South Carolina Electric and Gas Company Scholarship is $500 awarded to an outstanding member of the Corps of Cadets from South Carolina.

Vandiver-Sullivan Scholarship has a value of $500 a year for four

years. The recipients are limited to residents of Anderson County. This award was established by Mr. David S. Vandiver, Jr., Class of 1931, and Mr. Kelly W. Sullivan of Anderson.

The West End Dairy Scholarship was established in 1964 by Greswold Gwynette, Class of 1936, and pays $200 a year.

The Western Electric Scholarship is awarded each year to an outstanding senior majoring in engineering. The value is from $500 to $800.

The Judge C. C. Wyche Scholarships are made possible by a gift from the late Judge C. C. Wyche of the Class of 1906.

Category IV

There are numerous scholarships of this type. Applicants must apply directly to the individual or organization donor. Listed below are a few that have been continuous for many years.

The Charleston City Scholarships are worth $500 a year for four years. Appointments are made by the Committee on Ways and Means of the City Council on the basis of a competitive examination. Applicants must be residents of the City of Charleston.

The Cogswell Scholarship of the Washington Light Infantry pays $500 a year for four years and is limited to candidates who are members of the Washington Light Infantry, or, in the event no member is qualified, a son of a member of the Washington Light Infantry in good standing.

The North Charleston Citizens' Scholarship Committee each year gives numerous awards to worthy young men attending The Citadel from that area.

Post-Courier Scholarships are awards given by the Charleston newspapers. They are limited to newspaper carriers who are residents of South Carolina.

Sottile Foundation Scholarships. The Albert Sottile Foundation of Charleston, S. C., in accordance with its policy of furthering educational opportunities, offers several scholarships worth from $100 to $500 a year. Some scholarships are limited to young men in the employ of companies contributing to the Foundation, or to sons of the employees of said companies. Others are limited to Charleston County and appointments are made by the Foundation on the basis of competitive examinations.

General

Applicants for scholarships need not specify any particular scholarship. All applicants will be evaluated and the best applicants selected for the scholarships available. Selections are made on the basis of comparative evaluations of high school records, with all attributes desirable in a well-rounded cadet being considered. Entrance exami-

nation scores will be given some weight in the evaluation of an application.

The Star of the West and *Leventis Scholarships* were established primarily for the purpose of attracting to The Citadel outstanding young men and are not restricted by either financial need or geographical limitations.

Completed scholarship application forms should be submitted to the Chairman of the Committee on Scholarships prior to March 15. Application for admission to The Citadel must be on file with the Registrar at the time the scholarship application is filed. The Scholarship Committee will screen the applications and make awards by the middle of April. In certain cases, applicants may be asked to appear for a personal interview.

For information regarding Army and Air Force ROTC Scholarships see page 86.

Loans and Grants

The Citadel participates in the National Defense Student Loan, Educational Opportunity Grant and the Guaranteed Loan Program. To be elegible for aid through these programs, a student must be accepted for admission to The Citadel. In awarding aid under these or other programs there is no discrimination because of race, creed, color, or national origin.

National Defense Student Loans

Both currently enrolled cadets and new cadets who have been accepted for admission may apply for these loans. To be eligible for favorable consideration, applicants must establish financial need and give evidence of likely academic success. In accordance with the law, preference is given those applicants majoring in engineering, sciences, modern languages, or education.

To assist them in determining financial need, The Citadel National Defense Student Loan Committee requires the parents of all applicants to complete the Parents' Confidential Statement published and analyzed by the College Scholarship Service, Princeton, New Jersey 08540. The Citadel is one of the colleges holding membership in the College Scholarship Service.

A qualified student with demonstrated financial need may borrow up to the maximum amount of $1,000.00 per academic year. No interest is charged on these loans until the repayment period begins, which is nine months after the student ceases to attend an institution of higher learning. If the student enters the armed forces, Vista, or the Peace Corps, he may apply for a deferment of payment and his repayment begins at the conclusion of his deferment period. If the student enters the teaching field (at any level), up to half of the loan may be cancelled on a scheduled basis. Repayment of a National Defense Student Loan is made directly to The Citadel.

Educational Opportunity Grants Program

During the 1970-71 academic year, The Citadel will participate in the Educational Opportunity Grants Program as established under Title IV, Part A of The Higher Education Act of 1965, Public Law 89-319. This program provides assistance to eligible qualified high school graduates of exceptional financial need, who for lack of financial means of their own or their families would be unable to enter or remain in college. Since any grant awarded must be equally matched, The Citadel uses the National Defense Student Loan as matching funds. Thus, the National Defense Student Loan application is used in applying for this program.

Grants will be awarded to a student who:

(1) is a national of the United States, or is in the United States for other than a temporary purpose and intends to become a permanent resident thereof;

(2) has been accepted for enrollment as a full-time undergraduate student, or is in good standing and in full-time attendance as an under graduate student;

(3) shows evidence of academic or creative promise and capability of maintaining good standing in his course of study;

(4) is of exceptional financial need, as determined by the institution in accordance with criteria and schedules prescribed by the Commissioner, which takes into account such factors as the number of dependent children, income and assets of the students' family and without the assistant of an Educational Opportunity Grant, would be unable to pursue a course of study at such institution of higher education.

The Guaranteed Loan Program

United Student Aid Funds, Inc.

This program has terms very similar to the National Defense Student Loan program in regard to repayments and deferment, but without the cancellation clause for teachers. Loans approved by The Citadel are made by private lending institutions directly to the student.

State Guaranteed Loans (out-of-state students)

Because of the diversity in regulations governing the program, students and parents interested in their state program are urged to write for information to the State Board of Education, Higher Education Assistance Authority or similar agency in their home state.

ROTC Scholarships

Army and Air Force ROTC Scholarships, which cover tuition, college fees, books and supplies, plus $50 a month, are available to high school seniors. Application should be made early in the senior year of high school, preferably by 30 October. For further information, please write the Financial Aid Office. Students who are awarded ROTC Scholarships should see pages 76 and 77 of the expense section which concerns financial arrangements.

Financial Need

For programs which require that financial need be determined, The Citadel requires parents of all applicants to complete and submit a Parents' Confidential Statement form to the College Scholarship Service, Box 176, Princeton, New Jersey 08540.

Entering freshmen should obtain the Parents' Confidential Statement through their local high school. Cadets should direct their requests to the Financial Aid Office.

Application Deadline

All aid applications for the academic year beginning in September should be in the Financial Aid Office by 15 March. Those received after this date will be considered as to date received and availability of funds.

INFORMATION

Further information about financial aid programs at The Citadel and application forms should be requested from:

Financial Aid Office, The Citadel, Charleston, S. C. 29409

Commercial Loan Programs

For those parents who prefer to pay their educational expenses in monthly installments, we suggest two private loan plans, namely Educational Funds, Inc., Howard Bldg, P. O. Box 4, Providence, Rhode Island 20901, or Tuition Plan of New Hampshire, Inc., Concord, New Hampshire 03301. Both of these firms are reputable and have assisted many of our students in the past. If you desire more information on either of these programs you should write directly to the company.

HONORS AND AWARDS

The Palmetto Award

The award is made by the Board of Visitors in recognition of exceptional performance which reflects great credit on The Citadel or the State of South Carolina. It is to be made to a member of the Corps of Cadets, alumni, faculty, or staff of The Citadel or any other person whose service to the college or state is deemed worthy of consideration. Members of the Board of Visitors, the President of The Citadel, or the Association of Citadel Men, may make nominations for candidates for this award and recipients must be unanimously approved by the Board of Visitors. This award will take precedence over all other honors awarded by The Citadel with the exception of honorary degrees.

Commencement Honors

The Algernon Sydney Sullivan Awards are bronze medallions presented by the college, through the benefaction of the New York Southern Society, to students or others in recognition of high thought and noble endeavor; established by the Society in 1925, the awards have been made to The Citadel since 1933.

The John O. Willson Ring.—The bequest of Dr. John O. Willson, a ring is given annually to the member of the first class voted by his classmates as the manliest, purest, and most courteous member of his class.

The Scholarship Medal is presented annually by the Board of Visitors to the cadet graduating at the head of his class.

Academic Honors and Awards

General High Honors are awarded to those cadets in the graduating class who have achieved an average academic standing for the four years of a grade point ratio of 3.60 or higher.

General Honors are awarded to those cadets who have achieved an average academic standing for the four years of a grade point ratio between 3.50 and 3.59, inclusive.

Department Honors are awarded on recommendation of heads of departments to those cadets of the graduating class who have established a grade point ratio of 3.50 or better in at least 36 semester hours work in their major department. This must include all departmental work required in the junior and senior years.

The Dean's List is a recognition given to those students registered for eleven or more semester hours whose grade point ratio is 3.00 or higher, with no grade below C, for the work of a semester. Medals are awarded and worn on the uniform the following semester.

Gold Stars are awarded to those students on the Dean's List who have made a grade point ratio of 3.60 or higher for the work of a

semester. Stars are worn on the collar of the uniform during the following semester.

The Citadel Honorary Society. Membership in The Citadel Honorary Society is limited to members of the first class whose standing is in the upper eight percent of their class.

The Francis Marion Cup is awarded by the Rebecca Motte Chapter, D.A.R., to a cadet of the June graduating class for outstanding achievement in American History.

The Granville T. Prior Award consists of key and scroll presented annually by The Citadel History Club to the student whose first-class essay is selected by a joint faculty committee as the best in the departments of English, History, and Political Science. It is named in honor of the late Head of The Citadel History Department.

William E. Mikell Award, a cash award donated by the late William E. Mikell, is awarded to that member of the graduating class having the highest average in English over a three-year period.

The Wall Street Journal Student Achievement Award is donated by the *Wall Street Journal* and awarded to the student having the greatest achievement in Business Administration during the school year.

The Charles P. Summerall Cup is donated by the European Citadel Association and awarded annually for one year to the company of cadets which makes the greatest improvement in scholastic work during the college year.

Post-Courier Awards are given by the *Post-Courier* to the three best writers on *The Brigadier Staff* as chosen by a committee of faculty members from the Department of English.

The Peter Gaillard Memorial Award is given annually by Colonel and Mrs. St. Pierre Gaillard in memory of Peter Gaillard of the Class of 1948 to a graduating first classman majoring in electrical engineering on a basis of scholastic attainment, leadership, and participation in extracurricular activities.

The Charles T. Razor Memorial Award is given annually in memory of Colonel Charles T. Razor to a graduating cadet selected by the Head of the Department of Electrical Engineering on the basis of scholastic achievement, ability, and willingness to help others.

The Colonel Louis Shepherd LeTellier Award is given annually to a member of the graduating class attaining the highest academic average in Civil Engineering.

The George Walker White Award is given annually by Mrs. James Boyd Strawn and Mrs. Robert Neal Garrison in memory of their father, Class of 1904. This monetary award goes to a member of the graduating class for outstanding achievement in Civil Engineering.

The Colonel Christopher Schultz Gadsden Memorial Award, in memory of Colonel Gadsden, Class of 1852, is given annually to the

"Best all around Civil Engineering graduate" as selected by the Civil Engineering faculty.

The Captain William Forman Abernathy Memorial Award. Awarded annually in memory of Capt. William F. Abernathy, Class of 1962, to the rising senior who has shown the greatest amount of determination and perserverance in improving himself during his years at The Citadel.

The Reuben Burton Pitts III, Memorial Award is given annually in memory of Cadet Reuben Burton Pitts III, Class of 1963, to the second classman who is selected by his classmates as the friendliest in his class.

The Carlisle Norwood Hastie Award is given annually to the graduating first classman who has been selected by his classmates as having shown the most tact, consideration, and courtesy to his fellow students.

Henry J. Taylor Cup is presented annually to the graduating first classman who has demonstrated the greatest journalistic improvement.

The Colonel James K. Coleman Award is in honor of Colonel Coleman, Class of 1919, who established the Department of Political Science at The Citadel. It is given annually by Pi Sigma Alpha, National Political Science Honor Society, to the first classman in political science with the hghest scholastic record for the four years.

Military Awards

ROTC Distinguished Military Student Program—Students whose proficiency in military training and whose qualities of leadership and attention to duty have merited the approbation of the Professor of Military Science are designated Distinguished Military Students.

Distinguished Military Students are eligible to apply for appointment as Second Lieutenants in the Regular Army when they have registered for their last academic year.

The 103rd Field Artillery Award was established by the veteran's organization of that regiment as a trophy to be won each year by the company of cadets which has attained the best record in discipline in the Corps of Cadets.

The Association of U. S. Army Medal is donated by the Association of the United States Army and awarded annually to the outstanding Army Second Class ROTC Cadet.

A Certificate of Meritorious Leadership Achievement is awarded annually by the Commanding General, Third United States Army, to a graduating Cadet selected on the basis of leadership development throughout his ROTC Career.

Widder Award is presented annually by Mr. and Mrs. John D. Widder in memory of their son, Capt. David John Widder, U.S.A., Class of 1959, to the outstanding Distinguished Military Student in Army ROTC.

The Washington Light Infantry Marksmanship Trophy and Medals consists of a trophy awarded annually for one year to the organization whose team makes the highest score in small-bore rifle marksmanship; silver medals to the Cadet making the highest individual score. All are presented by the Washington Light Infantry.

Distinguished Air Force Reserve Officer Training Corps (AFROTC) Cadets—The Professor of Aerospace Studies (PAS) designates as Distinguished AFROTC Cadets those senior Cadets who distinguish themselves by displaying outstanding qualities of leadership, adaptability to military training and academic ability. Those Distnguished Cadets who are selected for Regular appointment will be considered for final approval at USAF Military Personnel Center. Distinguished Cadets not initially selected for Regular appointment will retain the Distinguished Graduate identification for subsequent consideration of future Regular appointment boards.

The American Legion AFROTC General Military Excellence Award is presented annually to a cadet in each of the first and second classes who has demonstrated outstanding qualities of military leadership, discipline, character and citizenship.

The American Legion AFROTC Scholastic Award is presented annually to a cadet in each of the first and second classes who has demonstrated qualities of outstanding leadership and scholastic achievement.

The Air Force Association Award is presented each year to the outstanding first class AFROTC Cadet possessing outstanding leadership characteristics.

The National Defense Transportation Association Award is presented annually to a first class AFROTC Cadet, majoring in business administration, who qualifies for the Air Force specialty of air or surface transportation officer.

The General Dynamics AFROTC Cadet Award is donated by its Convair Division to a member of the sophomore class. This cadet must have demonstrated outstanding qualities in the AFROTC Program.

Air Force Times Award of Merit is awarded annually to a graduating Air Force ROTC Cadet who has distinguished himself by contributing materially to constructive public attention for the Cadet Corps.

The Roland F. Wooten Trophy is presented annually to the outstanding graduating cadet in the pilot category. The late Major Wooten, the most decorated airman from South Carolina, was a 1936 Citadel graduate and a leading citizen from Charleston. The award is based on performance and achievements as an AFROTC Cadet including his performance in the Flight Instruction Program.

American Fighter Aces Award is presented annually to the outstanding graduating cadet in the pilot category in each geographical

AFROTC area. It is based on his performance and achievements as an AFROTC Cadet.

Society of American Military Engineers Award—Awarded annually to a member of the first and second class who is majoring in Engineering and has demonstrated outstanding academic achievements.

The South Carolina Reserve Officers Association Awards are donated annually by the Reserve Officers Association and awarded to both the outstanding Army ROTC First Class Cadet and Air Force ROTC First, Second and Third Class Cadets for demonstrating courtesy. personal attributes, positive attitude and promotion potential.

The Wade Hampton Saber is awarded annually by the South Carolina Division to the member of the First Class who is most outstanding in leadership and who makes the greatest contribution to The Citadel while a Cadet.

The Star of the West Medal—Originally presented to The Citadel by Dr. B. H. Teague, is awarded annually to the best drilled Cadet.

The W. C. White Medal is presented annually by Mrs. W. C. White to the Company Commander of the best drilled company.

Daughter of the American Colonists Award is given annually to the First Classman with the best disciplinary record during his four years at The Citadel.

Armed Forces Communications and Electronics Association Awards are donated and awarded annually to both the outstanding Air Force and Army ROTC First Class Cadet majoring in engineering, mathematics, chemistry and physics.

Sons of the American Revolution Awards are donated and awarded annually to the outstanding Army and Air Force Fourth Class Cadets on the basis of leadership ability, soldierly bearing and excellence in ROTC studies and activities.

The Major William M. Hutson Award is presented annually by Colonel and Mrs. J. C. Hutson in memory of their son, Major William M. Hutson, USAF, Class of 1939, to a rising Senior selected for outstanding leadership ability, academic standing, and devotion to duty.

The Commandant's Cup is donated annually by the late Colonel W. C. Miller for one yaer to the best drilled company.

The J. D. Sehorne Trophy is awarded annually to the platoon winning the platoon drill competition.

The Order of Cincinatti Award is presented annually to a Cadet Officer who has exemplified in the highest degree the qualities of soldier and citizen.

The Objectives of The Citadel

The objectives of The Citadel, The Military College of South Carolina, are to offer such courses in the liberal arts and sciences as will develop the minds and characters of the students, increase their likelihood of success in any useful pursuit, and fit them to discharge the duties of citizenship; to provide concentration in certain professional and technical fields which will enable its graduates to compete sucessfully in business or the professional practice of their specialties; to see that its graduates are adequately equipped in their respective fields of concentration to enter in full standing postgraduate, professional, or technical schools; and to qualify them for commissions in the Armed Forces through participation in a system of military training second only in rigor and thoroughness to that available at the national service academies.

Entrusted with young men at a critical stage of their development, the college seeks also to provide wholesome activities, services and facilities which will contribute to the development in its students of character, physical fitness, and moral and religious principles, thereby preparing them to meet the requirements of citizens and especially of leaders.

The Citadel, as a state-supported institution, recognizes its obligation to provide needed educational programs as its contribution to the education of South Carolina youth. The Citadel will, therefore, actively participate with other state-supported colleges in the Charleston area, by utilizing its faculty and facilities, by initiating new programs to accommodate the needs of the citizens of this state, and in other ways it can be of service to a cooperative effort.

Courses

The course of study is essentially the same for most freshmen except for those in the science or engineering majors, who are required to take Chemistry 101-102 and may be required to take some courses in the particular department of specialization. Certain subjects are required in the sophomore year of all students, the remaining subjects being determined by the course which the student chooses to follow during his junior and senior years. Major work is offered in the following departments: Biology, Business Administration, Chemistry, Civil Engineering, Education, Electrical Engineering, English, History, Mathematics, Modern Languages, Physical Education, Physics, and Political Science. A thorough premedical program is also available in the A.B. Chemistry and the Biology majors.

A statement of the courses required each year in each department and a detailed description of the various courses will be found on pages 100 through 236.

Grades

Only letter grades are given to evaluate a student's progress. The following definitions of letter grades are applicable:

1) "A" represents superior attainment on the part of the student.
2) "B" represents work that is clearly higher than the average, but not superior.
3) "C" represents average attainment of the basic standards set for the course.
4) "D" represents minimum attainment of the basic standards.
5) "F" represents failure.
6) "I" represents work of satisfactory quality incomplete for authorized reasons. Incomplete (I) grades must be made up during the following full semester after the recording of the grade. If the grade is not made up in this period of time, it will be changed to a grade of "F". The summer session will not be considered a semester in this case. An extension of time due to extenuating circumstances may be authorized by the department head and the Academic Dean.

No numerical symbol, bracket, or percentage is fixed or assigned the equivalent of any grade. Arbitrary distributions of grades according to some formula or curve is not used to obtain uniformity of grading. However, by means of departmental supervision and consultation between instructors, every effort is made to obtain consistent grading procedure within the departments.

Whenever a course previously passed is repeated, the last grade made for the course is the grade of record for computing quality points and grade point ratio. No course may be taken more than three times at The Citadel for a grade.

Grade reports are mailed to parents or guardians at the end of each semester. Mid-semester progress reports are sent to parents showing the status of the cadet's academic work at that time.

Changes in schedule must be effected during the first seven days of the term. A subject dropped after the first nine weeks will receive a grade of WP (withdrew passing) or WF (withdrew failing). A full-time student, however, must continue to take courses with at least 12 semester hours credit each semester.

For purposes of ascertaining quality and grade point ratio (GPR) to determine class standing or promotion, grades are weighted as follows:

Grade	Grade Points Per Semester Hour
A	4
B	3
C	2
D	1
F, WF, WP, I	0

The grade point ratio is determined by dividing the total number of quality points earned by the total number of semester hours attempted, including the hours for which the following grades were received: A, B, C, D, F, WF, I.

In computing the GPR, quality points and hours earned at other institutions are not included in the totals.

Semester hours earned at other institutions are counted in determining a student's classification or category as regards academic standards.

Pass-Fail Grading System

Juniors and seniors with cumulative grade point ratio of 2.0 or better may elect courses on a pass-fail option, but no more than one each term or a total of four for graduation credit. A student may not take on the pass-fail option any course which is required in his major. The decision of whether or not the course a student chooses is required in his major is the responsibility of the head of the student's major department. The student may not change his decision to take the course on the pass-fail basis or for a letter grade after the first two weeks of the term. Courses elected on the pass-fail option carry graduation credit, but no quality points, and are not included in GPR computations.

Instructors report grades as usual; A through F, WP, WF, Incomplete. The Records Office translates grades as follows:

1) A grade of C through A as "P" (pass - for credit)
2) A grade of D or F as "F" (fail - no credit)

Transfer Credits

Entering students who desire transfer credits from other accredited colleges will have official transcripts sent to the Registrar of The Citadel and will provide catalogue descriptions of the courses involved. The head of The Citadel academic department concerned and the Registrar will then evaluate the courses to determine those for which transfer credit will be allowed. Only grades of "C" or better will be considered for transfer credit.

Students who expect to continue enrollment at The Citadel or to return after withdrawing may take courses at other accredited institutions for transfer to The Citadel provided prior authorization is obtained. To be eligible for transfer, courses must be certified by the department head concerned as equivalent to a course at The Citadel, and the semester hours transferred will not be greater than for the equivalent Citadel course.

All transfer credits are provisional. If a department involved finds within four weeks after classes begin that the student is not prepared to take a course for which the course transferred is a prerequisite, the allowance or credit is withdrawn, and the student must take the prerequisite course at The Citadel.

To be eligible for graduation, all students, including transfer students from other colleges, are required to earn at The Citadel a minimum of one-half the semester hours prescribed for the major course of study.

Candidates for a degree who do not complete all requirements for graduation when scheduled may take not more than two approved courses at another institution for transfer to The Citadel. Prior approval of these courses by the department head concerned is mandatory. Normally the only courses which can be taken elsewhere will be those not offered at The Citadel during the summer session or semester involved.

Promotions

Conditions for promotion to a higher class are given in the following table:

To Class	Number of Semester Hours Behind in Major Program	Accumulated Quality Points
Third	Not more than eight (8)	42, at least
Second	Not more than eight (8)	120, at least
First	Must be able to graduate in two semesters	195, at least

In addition, for promotion to the first class, the student must have completed all the courses required in his academic major for the fourth and third classes. Exception to the course requirement will be made for the foreign language for those students who transfer at the end of the third-class year from one major to another involving a different foreign language.

Academic Probation and Discharge

a. Any full-time student who fails to pass successfully 24 semester hours in each twelve-month period after entrance will be discharged for academic deficiency.

b. A student will be put on probation for a semester or discharged for academic deficiency if at the beginning of any semester his cumulative ratio of quality points earned at The Citadel to credit hours passed at The Citadel falls below the minimum for his category as shown in the following table:

Credit Hours Passed	Minimum Ratio of Quality Points to Credit Hours Passed For Continuance in College	Probation
0-39	1.20	1.30
40-69	1.30	1.40
70-99	1.50	1.60
100 & above	1.70	1.80

c. A student on probation in any category must by the beginning of the next semester remove himself from probation if he remains in the same category or be eligible to continue in college if he progresses to the next higher category.

d. Penalty for Probation

A student on probation will be denied the following:

1) Class leave privileges as specified by the Commandant of Cadets and approved by the Academic Dean.
2) Holding of cadet military rank.
3) Authorization to take any course overload.

e. A student will not be subject to academic discharge rules until the end of his second semester at The Citadel.

f. A student placed on academic probation more than twice after his first two semesters will be discharged for academic reasons.

g. A student who is discharged for academic reasons the first time may apply for readmission after being out of school for one semester. (Summer school does not constitute a semester in this instance). If approved by the Admissions Committee, he will be readmitted on a probationary status for one semester and must obtain the minimum ratio of quality points to credit hours passed for his category for continuance in college at the beginning of the next semester. If a student is discharged for a second time for academic reasons, he will not be considered for readmission.

h. To continue in school after the eighth semester requires the approval of the Academic Probation Committee.

Readmission Policy

A student wishing to return to The Citadel, having withdrawn, must file an application for readmission with the Registrar. Action on this application is determined by the Committee on Admissions, which will consider not only the applicant's past academic record, but also his suitability as a member of the Corps of Cadets. The recommendation of the Committee on Admissions must have the approval of the President.

Cadets who withdraw due to academic deficiencies will be ineligible for readmission consideration until the lapse of one semester of the regular school year. (The summer session is not considered a semester in this instance). If a cadet who has been discharged for academic deficiencies is accepted for readmission, he will be on probation the following semester.

Any departure from this policy may be made only in cases with extreme extenuating circumstances.

Requirements for Graduation

For graduation, a student must complete satisfactorily one of the departmental major courses of study stated in this catalogue. He must accumulate at The Citadel quality points amounting to twice the number of semester hours passed at The Citadel.

A student must complete, in residence, a minimum of one semester with at least twelve semester hours of passing work, approved by the

department concerned, after his final change of major prior to graduation. (For purposes of this policy, both halves of a summer session will be considered a semester).

Normally, requirements for graduation are met by full-time students in four years, but a longer time may be required by those who are discharged and then granted readmission. Whenever it becomes evident that a full-time student cannot fulfill all the requirements for graduation within five academic years (ten semesters), he will be discharged for academic deficiency.

In addition to the formal credits required for graduation, the candidate must have demonstrated that he is of high character and worthy to receive the diploma of the college. Recommendations for graduation are made by the Academic Board to the Board of Visitors, which in turn awards the degrees.

Degrees

The degree of Bachelor of Arts is conferred upon satisfactory completion of the Chemistry, English, History, Modern Language, or Political Science programs of study. The degree of Bachelor of Science is conferred upon satisfactory completion of the Biology, Chemistry, Education, Mathematics, Physical Education, or Physics program.

The degree of Bachelor of Science in Business Administration is awarded to students who complete satisfactorily the course in Business Administration.

Graduates in Civil Engineering receive the degree of Bachelor of Science in Civil Engineering. Graduates in Electrical Engineering receive the degree of Bachelor of Science in Electrical Engineering.

Classification of Cadets

The cadets are arranged in four distinct classes, corresponding with the four years of study. Cadets pursuing the first year's course constitute the Fourth or Freshman Class; those taking the second year's course, the Third or Sophomore Class; those in the third year's course, the Second or Junior Class; and those in the fourth year's course, the First or Senior Class.

Courses of Study

In the following pages will be found a detailed schedule of the curriculum required for each degree according to the major subject elected. The clock hours and the credit value of each course are noted. The individual courses are described under the appropriate departmental heading in the pages following the schedules.

The geology courses are offered in the Department of Chemistry; the drawing, in the Department of Civil Engineering; the fine arts, psychology, philosophy, and sociology, in the Department of Education.

The courses of the fourth class are numbered from 101 *upward, of the third class from* 201 *upward, of the second class from* 301 *upward, and of the first class from* 400 *upward.*

Graduate Program

In the fall of 1968, with the approval of the Southern Association of Colleges and Schools, The Citadel inaugurated a program of graduate courses leading to the degree of Master of Arts in Teaching. This program is designed to assist secondary school personnel in extending their knowledge, improving their skills and enhancing their professional status. The graduate courses are given in the evening program and during the summer sessions.

Admission

Admission to Courses will be through submission and approval of an application with transcripts of all graduate and undergraduate credits earned and proof of graduation from an approved four-year college; proof of a satisfactory score on the National Teachers Examination or the Graduate Record Examination or the Miller Analogies Test; letters of recommendation from two former college professors or immediate superiors in recent employment; a personal interview with a designated official.

Admission to Candidacy for the degree will be through the above requirements and, additionally, completion of not less than six hours in approved courses at The Citadel, creditable toward the MAT degree, proof of a satisfactory score on the Graduate Record Examination, evaluations from two of the individual's graduate professors at The Citadel, and approval of the individual's program of studies.

Requirements for Graduation

Credit Requirements include completion of thirty semester hours with a minimum average grade of "B", based on a grade ratio, in the individual's major and a minimum grade average of "B" in his minor. Graduate credit will be given only for grades of "A", "B", and "C". At least one-half of the courses taken must have been for graduates only (above the 499 level), whereas the remainder may have been in approved upper division courses (300 through 499 level). Not more than six hours, relevant to the student's program, may be accepted by transfer from other colleges. Correspondence course credits will not be accepted. Creditable hours must have been earned within six years of the graduation date. A minimum of twelve semester hours in an approved program must be completed by a student at The Citadel after being admitted to candidacy for the MAT degree.

The Major will consist of eighteen to twenty-one hours, the Minor, nine to twelve hours. Major work is offered in the following departments: Biology, Education (Secondary), English, History, and Mathematics.

For further information consult The Citadel Graduate Bulletin, which lists admission procedures, general policies, and course titles and descriptions or write to the Director of Graduate Studies, The Citadel, Charleston, South Carolina 29409.

B. S. BIOLOGY MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)
General Chemistry	Chem.	101	3	(3,0)
General Chemistry Laboratory	Chem.	111	1	(0,2)
Fundamental Mathematics	Math.	101	3	(3,0)
Introduction to Botany	Bio.	103	4	(3,2)
1st Year Basic R.O.T.C.		101	2	(2,0)
			16	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
College Physics	Phys.	205	4	(3,2)
German, French, or Russian	M. L.	101	3	(3,0)
American History	Hist.	101	3	(3,0)
Biology Elective	Bio.		3(4)	
2nd Year Basic R.O.T.C.		201	2	(2,0)
			18(19)	

JUNIOR YEAR—

German, or	M. L.	203	3	(3,0)
French, or Russian	M. L.	201		
College Physics	Phys.	207	4	(3,2)
Organic Chemistry	Chem.	303	4	(3,3)
Biology Elective	Bio.		3(4)	
1st Year Advanced R.O.T.C.		301	2	(3,0)
			16(17)	

SENIOR YEAR—

Biology Elective	Bio.		3(4)	
Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
2nd Year Advanced R.O.T.C.			2	(3,0)
			17(18)	

The seven biology elevtices will include at least one course in the following areas: *Physiology*: 205, 403, 404; *Field Biology*: 210, 406, 409, 410; and *Developmental Biology*: 208, 308, 401, and two courses in the area of *Descriptive Biology*: 301, 302, 310, 312, 315, 402, 405. It is strongly recommended that each biology major take at least one advanced botany and one advanced zoology course in addition to Biostatistics. Quantitative Analysis, 202 and Mathematics 201, 202 are also recommended.

B. S. BIOLOGY MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3	(3,0)
General Chemistry	Chem.	102	3	(3,0)
General Chemistry Laboratory	Chem.	112	1	(0,2)
Fundamental Mathematics	Math.	102	3	(3,0)
Introduction to Zoology	Bio.	104	4	(3,2)
1st Year Basic R.O.T.C.		102	2	(2,0)
			16	

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3	(3,0)
College Physics	Phys.	206	4	(3,2)
German, French, or Russian	M. L.	102	3	(3,0)
American History	Hist.	102	3	(3,0)
Elective			3	(3,0)
2nd Year Basic R.O.T.C.		202	2	(2,0)
			18	

JUNIOR YEAR—

German, or	M. L.	204	3	(3,0)
French, or Russian	M. L.	202		
Elective			3	(3,0)
Organic Chemistry	Chem.	304	4	(3,3)
Biology Elective	Bio.		3 (4)	
Biology Elective	Bio.		3 (4)	
1st Year Advanced R.O.T.C.		302	1	(3,0)
			17 (19)	

SENIOR YEAR—

Public Speaking	Engl.	205	3	(3,0)
Biology Elective	Bio.		3 (4)	
Senior Seminar	Bio.	411	1	(1,0)
Elective			3	(3,0)
Elective			3	(3,0)
*Senior Research Project, or	Bio.	420	3	(3,0)
Biology Elective	Bio.		3 (4)	
2nd Year Advanced R.O.T.C.		402	1	(3,0)
			17 (19)	

* Prerequisite is approval by Department Head and supervising professor.

BUSINESS ADMINISTRATION MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
Science (Biology, Chemistry, or Physics)			4 (3,2)
Fundamental Mathematics	Math.	101	3 (3,0)
Survey of American History	Hist.	101	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.		101	2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
A Modern Language			3 (3,0)
Economic Origins and Principles	B.Ad.	201	3 (3,0)
**American National Government	Polit.	201	3 (3,0)
Approved Non-business Elective			3 (3,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			17

JUNIOR YEAR—

Accounting Principles and Practices I	B.Ad.	303	3 (2,2)
Business Law	B.Ad.	305	3 (3,0)
**Principles of Labor	B.Ad.	307	3 (3,0)
**Marketing Principles	B.Ad.	309	3 (3,0)
Departmental Elective			3 (3,0)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			17

SENIOR YEAR—

Intermediate Accounting	B.Ad.	400	3 (2,2)
Corporate Financial Management	B.Ad.	403	3 (3,0)
Marketing Management	B.Ad.	405	3 (3,0)
Money and Banking	B.Ad.	407	3 (3,0)
Personnel Management	B.Ad.	409	3 (3,0)
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			17

DEPARTMENTAL ELECTIVES

Business Statistics II	B.Ad.	206	3 (3,0)
Insurance	B.Ad.	308	3 (3,0)
Foreign Trade	B.Ad.	310	3 (3,0)
Intermediate Economics	B.Ad.	314	3 (3,0)

*Represents semester hour credits, lectures, and laboratory hours in that sequence.
**May be taken in either semester.

BUSINESS ADMINISTRATION MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
Science (Biology, Chemistry, or Physics)			4 (3,2)
Fundamental Mathematics	Math.	102	3 (3,0)
Survey of American History	Hist.	102	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.		102	2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
A Modern Language			3 (3,0)
Economic Principles and Problems	B.Ad.	202	3 (3,0)
**Business Statistics I	B.Ad.	205	3 (3,0)
Approved Non-business Elective			3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			17

JUNIOR YEAR—

Accounting Principles and Practices II	B.Ad.	304	3 (2,2)
Business Organization and Finance	B.Ad.	306	3 (3,0)
**Computer Principles	C.S.	305	3 (3,0)
**Government Finance	B.Ad.	311	3 (3,0)
Departmental Elective			3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			16

SENIOR YEAR—

Production Management	B.Ad.	410	3 (3,0)
Approved Non-business Elective			3 (3,0)
Taxation	B.Ad.	312	3 (3,0)
Departmental Elective			3 (3,0)
Departmental Elective			3 (3,0)
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

DEPARTMENTAL ELECTIVES

Industrial Accounting	B.Ad.	401	3 (2,2)
Advanced Accounting	B.Ad.	402	3 (2,2)
Investments	B.Ad.	404	3 (3,0)
Transportation	B.Ad.	406	3 (3,0)
Bank Management	B.Ad.	408	3 (3,0)

TOTAL HOURS — 136

A. B. CHEMISTRY MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)*
General Chemistry	Chem.	101	3	(3,0)
General Chemistry Laboratory	Chem.	111	1	(0,2)
Fundamental Mathematics	Math.	101	3	(3,0)
Survey of American History	Hist.	101	3	(3,0)
German, French, or Russian	M. L.	101	3	(3,0)
1st Year Basic R.O.T.C.		101	2	(2,0)
			18	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
College Physics	Phys.	205	4	(3,2)
Elective			3	(3,0)
Elective			3	(3,0)
German, French, or Russian	M. L.	201	3	(3,0)
2nd Year Basic R.O.T.C.		201	2	(2,0)
			18	

JUNIOR YEAR—

Organic Chemistry	Chem.	303	4	(3,3)
College Physics, or	Phys.	207	4	(3,2)
(General Physics)	Phys.	212	4	(3,2)
Elective			3	(3,0)
Elective			3	(3,0)
1st Year Advanced R.O.T.C.		301	2	(3,0)
			16	

SENIOR YEAR—

Chemistry Elective	Chem.	(4)	3	
Public Speaking	Engl.	205	3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
2nd Year Advanced R.O.T.C.		401	2	(3,0)
			(18)17	

Medical or Dental candidates should take: Principles of Biology, 101, General Zoology, 202—8 cr; Comparative Anat. 302, 4 cr; Vertebrate Embryol. 401, 4 cr. And it is recommended that they take: Genetics 308, 3 cr; Histology 402, 3 cr; General Psychology, 301, 3 cr; Abnormal Psychology, 304, 3 cr; Mammalian Physiology, 403, 4 cr; and Math. 119, 121 (in lieu of Math. 101, 102); or Math. 101, 102, 201 and 202.

*—Represents semester hour credits, lectures, and laboratory hours in that sequence.

A. B. CHEMISTRY MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3	(3,0)*
General Chemistry	Chem.	102	3	(3,0)
General Chemistry Laboratory	Chem.	112	1	(0,2)
Fundamental Mathematics	Math.	102	3	(3,0)
Survey of American History	Hist.	102	3	(3,0)
German, French, or Russian	M. L.	102	3	(3,0)
1st Year Basic R.O.T.C.		102	2	(2,0)
			18	

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3	(3,0)
College Physics	Phys	206	4	(3,2)
Quantitative Analysis	Chem.	202	4	(2,4)
Elective			3	(3,0)
German, French, or Russian	M. L.	202	3	(3,0)
2nd Year Basic R.O.T.C.		202	2	(2,0)
			19	

JUNIOR YEAR—

Organic Chemistry	Chem.	304	4	(3,3)
Survey of Physical Chemistry	Chem.	301	3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
1st Year Advanced R.O.T.C.		302	1	(3,0)
			17	

SENIOR YEAR—

Chemistry Elective		(4)	3	
Chemistry Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
**Senior Research Project or Chemistry Elective			3	(3,0)
2nd Year Advanced R.O.T.C.		402	1	(3,0)
			(17)16	

TOTAL HOURS — (141) 139

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

Approved Chemistry electives: 309, Special Topics in Analytical Chemistry; 310, Survey of Nuclear Science; 312, Chemical Bonding and Structure; 403, 404, Advanced Topics in Organic Chemistry; 407, Organic Preparations; 408, Qualitative Organic Analysis.

**With approval of Department Head.

B. S. CHEMISTRY MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
General Chemistry	Chem.	101	3 (3,0)
General Chemistry Laboratory	Chem.	111	1 (0,2)
Analytic Geometry and Calculus	Math.	131	4 (4,0)
Survey of American History	Hist.	101	3 (3,0)
1st Year Basic R.O.T.C.		101	2 (2,0)
			16

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
General Physics	Phys.	110	4 (3,2)
Intermediate Calculus	Math.	231	4 (4,0)
German	M. L.	101	3 (3,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			16

JUNIOR YEAR—

General Physics	Phys.	212	4 (3,2)
Organic Chemistry	Chem.	303	4 (3,3)
Physical Chemistry	Chem.	305	3 (3,0)
Physical Chemistry Laboratory	Chem.	315	1 (0,3)
Scientific German	M. L.	203	3 (3,0)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			17

SENIOR YEAR—

Inorganic Chemistry	Chem.	401	3 (3,0)
Advanced Topics Organic	Chem.	403	3 (3,0)
Organic Preparations	Chem.	407	3 (0,6)
Physical Chemistry Topics	Chem.	411	3 (3,0)
Elective			3 (3,0)
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			17

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

B. S. CHEMISTRY MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
General Chemistry	Chem.	102	3 (3,0)
General Chemistry Laboratory	Chem.	112	1 (0,2)
Analytic Geometry and Calculus	Math.	132	4 (4,0)
Survey of American History	Hist.	102	3 (3,0)
1st Year Basic R.O.T.C.		102	2 (2,0)
			16

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
General Physics	Phys.	211	4 (3,2)
Differential Equations	Math.	232	3 (3,0)
Quantitative Analysis	Chem.	202	4 (2,4)
German	M. L.	102	3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			19

JUNIOR YEAR—

Instrumental Methods	Chem.	302	4 (2,4)
Organic Chemistry	Chem.	304	4 (3,3)
Physical Chemistry	Chem.	306	3 (3,0)
Physical Chemistry Laboratory	Chem.	316	1 (0,3)
Scientific German	M. L.	204	3 (3,0)
Chemical Literature	Chem.	308	1 (1,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			17

SENIOR YEAR—

Inorganic Chemistry	Chem.	402	3 (3,0)
Advanced Topics Organic	Chem.	404	3 (3,0)
Qualititative Organic Analysis	Chem.	408	4 (1,6)
Inorganic Preparations	Chem.	412	2 (1,2)
Elective			3 (3,0)
Senior Research Project	Chem.	420	3
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			19

TOTAL HOURS — 137

CIVIL ENGINEERING MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
General Chemistry	Chem.	101	3 (3,0)
General Chemistry Laboratory	Chem.	111	1 (0,2)
Analytic Geometry and Calculus	Math.	131	4 (4,0)
Survey of American History	Hist.	101	3 (3,0)
Graphic Science	C. E.	101	2 (0,4)
1st Year Basic R.O.T.C.		101	2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
General Physics	Phys.	110	4 (3,2)
Intermediate Calculus	Math.	231	4 (4,0)
Surveying	C. E.	205	4 (3,2)
Non-Technical Elective			3 (3,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			20

JUNIOR YEAR—

General Physics	Phys.	212	4 (3,2)
Dynamics	C. E.	301	3 (3,0)
Mechanics of Materials	C. E.	303	4 (3,2)
Highway Engineering	C. E.	305	3 (3,0)
Materials Laboratory	C. E.	307	1 (0,3)
Engineering Geology	Geol.	303	3 (2,2)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			20

SENIOR YEAR—

Concrete Laboratory	C. E.	401	1 (0,2)
Reinforced Concrete	C. E.	403	3 (3,0)
Structural Analysis II	C. E.	405	3 (2,2)
Fluid Mechanics	C. E.	407	4 (3,2)
Soil Mechanics and Foundations	C. E.	409	3 (3,0)
Technical Elective			3 (3,0)
Senior Research Project	C. E.	420	0
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			19

*Represents semester hour credits, lectures, and laboratory hours in that sequence

CIVIL ENGINEERING MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3	(3,0)
General Chemistry	Chem.	102	3	(3,0)
General Chemistry Laboratory	Chem.	112	1	(0,2)
Analytic Geometry and Calculus	Math.	132	4	(4,0)
Survey of American History	Hist.	102	3	(3,0)
Graphic Science	C. E.	102	2	(0,4)
1st Year Basic R.O.T.C.		102	2	(2,0)
			18	

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3	(3,0)
General Physics	Phys.	211	4	(3,2)
Differential Equations	Math.	232	3	(3,0)
Surveying	C. E.	206	4	(3,2)
Statics	C. E.	202	3	(2,2)
Photogrammetry	C. E.	204	1	(0,2)
2nd Year Basic R.O.T.C.		202	2	(2,0)
			20	

JUNIOR YEAR—

Computer Application	C. E.	312	1	(1,0)
Highway Engineering	C. E.	306	3	(2,2)
Structural Analysis I	C. E.	308	3	(3,0)
Engineering Administration	C. E.	314	2	(2,0)
Electrical Engineering	E. E.	308	3	(2,2)
Non-technical Elective			3	(3,0)
Non-technical Elective			3	(3,0)
1st Year Advanced R.O.T.C.		302	1	(3,0)
			19	

SENIOR YEAR—

Soils Mechanics Laboratory	C. E.	402	1	(0,2)
Reinforced Concrete	C. E.	404	3	(3,0)
Steel Design	C. E.	406	3	(2,2)
Sanitary Engineering	C. E.	408	4	(3,2)
Soil Mechanics and Foundations	C. E.	410	3	(3,0)
Senior Research Project	C. E.	420	2	
2nd Year Advanced R.O.T.C.		402	1	(3,0)
			17	

TOTAL HOURS — 151

EDUCATION MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)*
Introduction to Botany	Biol.	103	4	(3,2)
Fundamental Mathematics	Math.	101	3	(3,0)
American History	Hist.	101	3	(3,0)
General Psychology	Psy.	201	3	(3,0)
1st Year Basic R.O.T.C.		101	2	(2,0)
			18	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
Chemistry or Physics			4	(3,2)
European Civilization	Hist.	201	3	(3,0)
§Music Appreciation	Arts	205	3	(3,0)
Personal and Community Health	P.Ed.	301	3	(3,0)
2nd Year Basic R.O.T.C.		201	2	(2,0)
			18	

JUNIOR YEAR—

Philosophy of Education	Educ.	301	3	(3,0)
Educational Psychology	Educ.	302	3	(3,0)
†Electives in Teaching Field			6	
§Elective			3	(3,0)
1st Year Advanced R.O.T.C.		301	2	(3,0)
			17	

SENIOR YEAR—

Methods and Materials	Educ.	401	3	(3,0)
Social Psychology	Psy.	305	3	(3,0)
Electives in Teaching Field			9	
2nd Year Advanced R.O.T.C.		401	2	(3,0)
			17	

*—Represents semester hour credits, lectures and laboratory hours in that sequence.

†—Student must decide upon his teaching-field major no later than beginning of Junior Year.

§—Student electing a foreign language will enroll for it during these semesters and defer Music Appreciation until the Junior or Senior Year.

EDUCATION MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)*
Introduction to Zoology	Biol.	102	4 (3,2)
Fundamental Mathematics	Math.	102	3 (3,0)
American History	Hist.	102	3 (3,0)
Public Speaking	Engl.	205	3 (3,0)
1st Year R.O.T.C.			2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
Chemistry or Physics			4 (3,2)
European Civilization	Hist.	202	3 (3,0)
Art Appreciation	Arts	206	3 (3,0)
†Elective in Teaching Field			3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			18

JUNIOR YEAR—

Child and Adolescent Development	Educ.	305	3 (3,0)
Elective in Education	Educ.		3 (3,0)
Elective in Teaching Field			6
†Elective			3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			16

SENIOR YEAR—

Directed Teaching	Educ.	400	6
Practicum	Educ.	403	3 (3,0)
Electives			6
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

TOTAL HOURS 138**

*—Does not include required physical education two hours weekly during first four semesters.

ELECTRICAL ENGINEERING MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
General Chemistry	Chem.	101	3 (3,0)
General Chemistry Laboratory	Chem.	111	1 (0,2)
Analytic Geometry & Calculus	Math.	131	4 (4,0)
Engineering Orientation	E. E.	101	1 (1,0)
Engineering Graphics	E. E.	103	2 (0,4)
1st Year Basic R.O.T.C.		101	2 (2,0)
			16

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
Intermediate Calculus	Math.	231	4 (4,0)
General Physics	Phys.	211	4 (3,2)
Survey of American History	Hist.	101	3 (3,0)
Introduction to Electrical Engineering	E. E.	201	3 (3,0)
Computer Programming	C. S.	201	1 (1,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			20

JUNIOR YEAR—

Advanced Calculus	Math.	321	3 (3,0)
Electrical Laboratory	E. E.	301	1 (0,2)
Introduction to Electronics	E. E.	305	3 (3,0)
Linear Circuit Analysis	E. E.	309	3 (3,0)
Applied Numerical Methods	C. S.	301	3 (3,0)
Humanities Elective			3 (3,0)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			18

SENIOR YEAR—

Seminar	E. E.	409	1 (1,0)
Electrical Laboratory	E. E.	411	1 (0,2)
Electromagnetic Theory	E. E.	417	3 (3,0)
Humanities Elective			3 (3,0)
Professional Elective			3 (3,0)
Professional Elective			3 (3,0)
Professional Elective			3 (3,0)
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			19

PROFESSIONAL ELECTIVES IN ELECTRICAL ENGINEERING—

Electronic Circuits	E. E.	401	3 (3,0)
Electrical Measurements	E. E.	405	3 (3,0)
Logical Design of Digital Computers	E. E.	407	3 (3,0)
Circuit Networks	E. E.	413	3 (3,0)
Automatic Control Systems	E. E.	415	3 (3,0)

* Represents semester hour credits, lectures, and laboratory hours in that sequence.

ELECTRICAL ENGINEERING MAJOR

Second Semester

FRESHMAN YEAR—				
Composition and Literature	Engl.	102	3	(3,0)
General Chemistry	Chem.	102	3	(3,0)
General Chemistry Laboratory	Chem.	112	1	(0,2)
Anlytic Geometry and Calculus	Math.	132	4	(4,0)
General Physics	Phys.	110	4	(3,2)
1st Year Basic R.O.T.C.		102	2	(2,0)
			17	
SOPHOMORE YEAR—				
Major British Writers	Engl.	202	3	(3,0)
Differential Equations	Math.	232	3	(3,0)
General Physics	Phys.	212	4	(3,2)
Survey of American History	Hist.	102	3	(3,0)
Introduction to Electrical Engineering	E. E.	202	3	(3,0)
2nd Year Basic R.O.T.C.		202	2	(2,0)
			18	
JUNIOR YEAR—				
Advanced Calculus	Math.	322	3	(3,0)
Electrical Laboratory	E. E.	302	1	(0,2)
*Technical Elective			3	(3,0)
Electromechanical Energy Conversion	E. E.	310	5	(5,0)
Public Speaking	Engl.	205	3	(3,0)
Humanities Elective			3	(3,0)
1st Year Advanced R.O.T.C.			1	(3,0)
			19	
SENIOR YEAR—				
Electrical Laboratory	E. E.	412	1	(0,2)
Electromagnetic Theory	E. E.	418	3	(3,0)
Humanities Elective			3	(3,0)
Professional Elective			3	(3,0)
Professional Elective			3	(3,0)
Professional Elective			3	(3,0)
2nd Year Advanced R.O.T.C.		402	1	(3,0)
			17	
PROFESSIONAL ELECTIVES IN ELECTRICAL ENGINEERING—				
Electronic Systems	E. E.	402	3	(3,0)
Electrical Power Systems	E. E.	408	3	(3,0)
Circuit Networks	E. E.	414	3	(3,0)
Automatic Control Systems	E. E.	416	3	(3,0)
System Simulation	E. E.	419	3	(3,0)
Senior Research Project	E. E.	420	3	

TOTAL HOURS — 144

*—Must be approved by department head.

ENGLISH MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
Fundamental Mathematics	Math.	101	3 (3,0)
Survey of American History	Hist.	101	3 (3,0)
French or German	M. L.	101	3 (3,0)
An approved elective			3 (3,0)
1st Year Basic R.O.T.C.		101	2 (2,0)
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
The English Language	Engl.	203	3 (3,0)
European Civilization since 1500	Hist.	201	3 (3,0)
French or German	M. L.	201	3 (3,0)
Biology, Chemistry, or Physics			4 (3,2)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			18

JUNIOR YEAR—

Chaucer	Engl.	301	3 (3,0)
Milton	Engl.	400	3 (3,0)
An English elective			3 (3,0)
An approved elective			3 (3,0)
An approved elective			3 (3,0)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			17

SENIOR YEAR—

Shakespeare	Engl.	401	3 (3,0)
American Literature	Engl.	403	3 (3,0)
An English elective			3 (3,0)
An approved elective			3 (3,0)
An approved elective			3 (3,0)
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			17

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

ENGLISH MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
Fundamental Mathematics	Math.	102	3 (3,0)
Survey of American History	Hist.	102	3 (3,0)
French or German	M. L.	102	3 (3,0)
An approved elective			3 (3,0)
1st Year Basic R.O.T.C.		102	2 (2,0)
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
The English Language	Engl.	204	3 (3,0)
European Civilization since 1500	Hist.	202	3 (3,0)
French or German	M. L.	202	3 (3,0)
Biology, Chemistry, or Physics			4 (3,2)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			18

JUNIOR YEAR—

An English elective			3 (3,0)
An English elective			3 (3,0)
An English elective			3 (3,0)
An Approved elective			3 (3,0)
An Approved elective			3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			16

SENIOR YEAR—

Shakespeare	Engl.	402	3 (3,0)
American Literature	Engl.	404	3 (3,0)
An English elective			3 (3,0)
An approved elective			3 (3,0)
An approved elective			3 (3,0)
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

TOTAL HOURS — 136

HISTORY MAJOR

First Semester

FRESHMAN YEAR—			
Composition and Literature	Engl.	101	3 (3,0)*
Fundamental Mathematics	Math.	101	3 (3,0)
American National Government	Polit.	201	3 (3,0)
Survey of American History	Hist.	101	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.		101	2 (2,0)
			17
SOPHOMORE YEAR—			
Major British Writers	Engl.	201	3 (3,0)
European Civilization Since 1500	Hist.	201	3 (3,0)
Economic Origins and Principles	B. Ad.	201	3 (3,0)
Biology, Chemistry, or Physics			4 (3,2)
A Modern Language			3 (3,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			18
JUNIOR YEAR—			
History of England	Hist.	301	3 (3,0)
United States Since 1900, or	Hist.	303	3 (3,0)
Europe in 20th Century, or	Hist.	305	
Social and Intellectual History of the United States	Hist.	313	
**Elementary Geography	Geog.	309	3 (3,0)
Elective			3 (3,0)
Elective			3 (3,0)
1st Year Advanced R.O.T.C.		301	2 (3,0)
			17
SENIOR YEAR—			
American Diplomatic History, or	Hist.	401	3 (3,0)
Latin American History, or	Hist.	403	
Far East in Modern Times	Hist.	409	
Colonial America, or	Hist.	405	3 (3,0)
Ancient World	Hist.	407	
Constitutional Law, or	Polit.	401	3 (3,0)
International Politics, or	Polit.	405	
Political Theory	Polit.	407	
Elective			3 (3,0)
Elective			3 (3,0)
2nd Year Advanced R.O.T.C.		401	2 (3,0)
			17

*Represents semester hour credits, lectures, and laboratory hours in that sequence.
**May be taken first or second semester.

HISTORY MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
Fundamental Mathematics	Math.	102	3 (3,0)
State and Local Government	Polit.	202	3 (3,0)
Survey of American History	Hist.	102	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.		102	2 (2,0)
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
European Civilization Since 1500	Hist.	202	3 (3,0)
Economic Principles and Problems	B. Ad.	202	3 (3,0)
Biology, Chemistry, or Physics			4 (3,2)
A Modern Language			3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			18

JUNIOR YEAR—

History of England	Hist.	302	3 (3,0)
United States Since 1900, or	Hist.	304	3 (3,0)
Europe in 20th Century, or	Hist.	306	
Social and Intellectual History of the United States	Hist.	314	
**One-semester History Course			3 (3,0)
Elective			3 (3,0)
Elective			3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			16

SENIOR YEAR—

American Diplomatic History, or	Hist.	402	3 (3,0)
Latin American History, or	Hist.	404	
Modern Russia	Hist.	410	
Colonial America, or	Hist.	406	3 (3,0)
Middle Ages	Hist.	408	
Constitutional Law, or	Polit.	402	3 (3,0)
International Politics, or	Polit.	406	
Political Theory	Polit.	408	
Elective			3 (3,0)
*Senior Research Project or Elective	Hist.	420	3 (3,0)
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

TOTAL HOURS — 136

*Prerequisite is approval by Department Head and supervising professor.

MATHEMATICS MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)*
General Chemistry	Chem.	101	3	(3,0)
General Chemistry Laboratory	Chem.	111	1	(0,2)
Analytic Geometry and Calculus	Math.	131	4	(4,0)
Survey of American History	Hist.	101	3	(3,0)
1st Year Basic R.O.T.C.		101	2	(2,0)
			16	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
General Physics	Phys.	211	4	(3,2)
Intermediate Calculus	Math.	231	4	(4,0)
Survey of American History	Hist.	102	3	(3,0)
German, French, or Russian			3	(3,0)
2nd Year Basic R.O.T.C.		201	2	(2,0)
			19	

JUNIOR YEAR—

Advanced Calculus	Math.	321	3	(3,0)
Modern Algebra	Math.	303	3	(3,0)
Theory of Numbers	Math.	309	3	(3,0)
German, French, or Russian			3	(3,0)
Elective			3	(3,0)
1st Year Advanced R.O.T.C.		301	2	(3,0)
			17	

SENIOR YEAR—

Numerical Analysis	Math.	407	3	(3,0)
Topology	Math.	409	3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
2nd Year Advanced R.O.T.C.			2	(2,0)
			17	

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

**May be taken the first semester.

***The choice of these courses will be made with the approval of the Head of the Department of Mathematics and supervising professor.

MATHEMATICS MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
General Chemistry	Chem.	102	3 (3,0)
General Chemistry Laboratory	Chem.	112	1 (0,2)
Analytic Geometry & Calculus	Math.	132	4 (4,0)
General Physics	Phys.	110	4 (3,2)
1st Year Basic R.O.T.C.		102	2 (2,0)
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
General Physics	Phys.	212	4 (3,2)
Differential Equations	Math.	232	3 (3,0)
Linear Algebra	Math.	240	3 (3,0)
French, German or Russian			3 (3,0)
**Computer Programming	C.S.	201	1 (1,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			19

JUNIOR YEAR—

Advanced Calculus	Math.	322	3 (3,0)
Modern Geometry	Math.	305	3 (3,0)
History of Mathematics	Math.	310	3 (3,0)
German, French, or Russian			3 (3,0)
Elective			3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			16

SENIOR YEAR—

Numerical Analysis	Math.	408	3 (3,0)
Topology	Math.	410	3 (3,0)
***Advanced Mathematics or Senior Research Project	Math. 422 or Math.	420	3
Elective			3 (3,0)
Elective			3 (3,0)
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

TOTAL HOURS — 137

MODERN LANGUAGE MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)*
Fundamental Mathematics	Math.	101	3	(3,0)
Survey of American History	Hist.	101	3	(3,0)
A Modern Language	M.L.	101/201	3	(3,0)
A Second Modern Language	M. L.	101	3	(3,0)
1st Year Basic R.O.T.C.		101	2	(2,0)
			17	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
Biology, Chemistry, or Physics			4	(3,2)
European Civilization Since 1500	Hist.	201	3	(3,0)
Major Modern Language	M. L.	201/301	3	(3,0)
Continuation of 2nd Modern Language	M. L.	201	3	(3,0)
2nd Year Basic R.O.T.C.		201	2	(2,0)
			18	

JUNIOR YEAR—

Continuation of 2nd Modern Language			3	(3,0)
Major Modern Language, or	M. L.	301/305		
Elective in Major Modern Language			3	(3,0)
The English Language	Engl.	203	3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
1st Year Advanced R.O.T.C.		301	2	(3,0)
			17	

SENIOR YEAR—

Continuation of 2nd Modern Language			3	(3,0)
Elective in Major Modern Language			3	(3,0)
Elective in Major Modern Language or Related Area			3	(3,0)
Elective			3	(3,0)
Elective			3	(3,0)
2nd Year Advanced R.O.T.C.		401	2	(3,0)
			17	

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

MODERN LANGUAGE MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl. 102	3	(3,0)
Fundamental Mathematics	Math. 102	3	(3,0)
Survey of American History	Hist. 102	3	(3,0)
A Modern Language	M. L. 102/202	3	(3,0)
A Second Modern Language	M. L. 102	3	(3,0)
1st Year Basic R.O.T.C.	102	2	(2,0)
		17	

SOPHOMORE YEAR—

Major British Writers	Engl. 202	3	(3,0)
Biology, Chemistry, or Physics		4	(3,2)
European Civilization Since 1500	Hist. 202	3	(3,0)
Major Modern Language	M. L. 202/302	3	(3,0)
Continuation of 2nd Modern Language	M. L. 202	3	(3,0)
2nd Year Basic R.O.T.C.	202	2	(2,0)
		18	

JUNIOR YEAR—

Continuation of 2nd Modern Language		3	(3,0)
Major Modern Language, or Elective in Major Modern Language	M. L. 302/306	3	(3,0)
The English Language	Engl. 204	3	(3,0)
Elective		3	(3,0)
Elective		3	(3,0)
1st Year Advanced R.O.T.C.	302	1	(3,0)
		16	

SENIOR YEAR—

Continuation of 2nd Modern Language		3	(3,0)
Elective in Major Modern Language		3	(3,0)
Elective in Major Modern Language or Related Area		3	(3,0)
Elective		3	(3,0)
Elective		3	(3,0)
2nd Year Advanced R.O.T.C.	402	1	(3,0)
		16	

TOTAL HOURS — 136

PHYSICAL EDUCATION MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3	(3,0)*
Fundamental Mathematics	Math.	101	3	(3,0)
Survey of American History	Hist.	101	3	(3,0)
Introduction to Phys. Ed.	P. E.	201	3	(3,0)
Music Appreciation	Art	205	3	(3,0)
1st Year Basic R.O.T.C.		101	2	(2,0)
Required Phys. Ed.	P. E.	101	0	(0,2)
			17	

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3	(3,0)
Modern Language or Physical Science			3 (4)	
Introduction to Public Speaking	Engl.	205	3	(3,0)
Approved Elective			3	(3,0)
Elective in Education			3	(3,0)
2nd Year. Basic R.O.T.C.		201	2	(2,0)
Required Phys. Ed.	P. E.	200	0	(0,2)
			17(18)	

JUNIOR YEAR—

Modern Language or Approved Elective			3	(3,0)
Anatomy	Bio.	303	3	(3,0)
Anatomy Lab	Biol.	305	1	(0,2)
Personal & Community Health	P. E.	301	3	(3,0)
Sports II	P. E.	306	3	(3,0)
Approved Elective			3	(3,0)
1st Year Advanced R.O.T.C.		301	2	(3,0)
Required Phys. Ed.	P. E.	200	0	(0,2)
			18	

SENIOR YEAR—

Child & Adolescent Development	Ed.	305	3	(3,0)
Organization & Administration of Phys. Ed.	P. E.	401	3	(3,0)
Adaptive Physical Education	P. E.	403	2	(2,0)
Health Education	P. E.	405	3	(3,0)
Tests & Measurements in Phys. Ed.	P. E.	412	2	(2,0)
Kinesiology	P. E.	414	2	(2,0)
2nd Year Advanced R.O.T.C.		401	2	(3,0)
			17	

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

PHYSICAL EDUCATION MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3	(3,0)
Fundamental Mathematics	Math.	102	3	(3,0)
Survey of American History	Hist.	102	3	(3,0)
Introduction to Zoology	Bio.	104	4	(3,2)
Art Appreciation	Art	206	3	(3,0)
1st Year Basic R.O.T.C.		102	2	(2,0)
Required Phys. Ed.	P. E.	102	0	(0,2)
			18	

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3	(3,0)
Modern Language or Physical Science			3(4)	
Sports I	P. E.	204	3	(3,0)
Approved Elective			3	(3,0)
Elective in Education			3	(3,0)
2nd Year. Basic R.O.T.C.		202	2	(2,0)
Required Phys. Ed.	P. E.	200	0	(0,2)
			17(18)	

JUNIOR YEAR—

Modern Language or Approved Elective			3	(3,0)
Physiology	Bio.	304	3	(3,0)
Physiology Lab	Biol.	306	1	(0,2)
Basketball Theory	P. E.	303	2	(2,1)
Gymnastics & Tumbling	P. E.	308	2	(1,2)
Approved Elective			3	(3,0)
Elective in Education			3	(3,0)
1st Year Advanced R.O.T.C.		301	1	(3,0)
Required Phys. Ed.	P. E.		0	(0,2)
			18	

SENIOR YEAR—

Care & Prevention of Athletic Injuries	P. E.	402	2	(2,0)
Football Injuries	P. E.	407	2	(2,0)
Physiology of Exercise	P. E.	416	3	(2,2)
Directed Teaching	Ed.	400	6	
2nd Year Advanced R.O.T.C.		402	1	(3,0)
			14	

TOTAL HOURS — 136

PHYSICS MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,(
General Chemistry	Chem.	101	3 (3,(
General Chemistry Laboratory	Chem.	111	1 (0,3
Analytic Geometry & Calculus	Math.	131	4 (4,(
Survey of American History	Hist.	101	3 (3,(
Modern Physics Lectures	Phys.	101	1 (1,(
1st Year Basic R.O.T.C.		101	2 (2,(
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,(
General Physics	Phys.	211	4 (3,
Intermediate Calculus	Math.	231	4 (4,(
German, French, or Russian	M. L.	101	3 (3,
Survey of American History	Hist.	102	3 (3,
2nd Year Basic R.O.T.C.		201	2 (2,
			19

JUNIOR YEAR—

Advanced Calculus	Math.	321	3 (3,
Advanced Physics			3 (3,
Advanced Physics			3 (3,
Laboratory Physics	Phys.	313	2 (0,
German, French, or Russian		201	3 (3,
Elective			3 (3,
1st Year Advanced R.O.T.C.		301	2 (3,
			19

SENIOR YEAR—

Advanced Physics			3 (3,
Advanced Physics			3 (3,
Elective			3 (3,
Senior Research Project	Phys.	420	
Elective			3 (3,
Laboratory Physics	Phys.	315	2 (0,
2nd Year Advanced R.O.T.C.		401	2 (3,
			16

*Represents semester hour credits, lectures, and laboratory hours in that sequen

PHYSICS MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
General Chemistry	Chem.	102	3 (3,0)
General Chemistry Laboratory	Chem.	112	1 (0,2)
Analytic Geometry & Calculus	Math.	132	4 (4,0)
General Physics	Phys.	110	4 (3,2)
1st Year Basic R.O.T.C.		102	2 (2,0)
			17

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
General Physics	Phys.	212	4 (3,2)
Differential Equations	Math.	232	3 (3,0)
German, French, or Russian	M. L.	102	3 (3,0)
Elective			3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			18

JUNIOR YEAR—

Advanced Calculus	Math.	322	3 (3,0)
Advanced Physics			3 (3,0)
Advanced Physics			3 (3,0)
Laboratory Physics	Phys.	316	2 (0,4)
German, French, or Russian		202	3 (3,0)
1st Year Advanced R.O.T.C.		302	1 (3,0)
			15

SENIOR YEAR—

Advanced Physics			3 (3,0)
Advanced Physics			3 (3,0)
Electronics	Phys.	318	4 (3,2)
Senior Research Project	Phys.	420	2
Elective			3
2nd Year Advanced R.O.T.C.		402	1 (3,0)
			16

TOTAL HOURS — 137

POLITICAL SCIENCE MAJOR

First Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	101	3 (3,0)*
Fundamental Mathematics	Math.	101	3 (3,0)
Biology, Chemistry, or Physics**			4 (3,2)
Survey of American History		101	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.			2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	201	3 (3,0)
Economic Origins, Principles, and Problems	B. Ad.	201	3 (3,0)
European Civilization Since 1500	Hist.	201	3 (3,0)
American National Government***	Polit.	201	3 (3,0)
A Modern Language			3 (3,0)
2nd Year Basic R.O.T.C.		201	2 (2,0)
			17

JUNIOR YEAR—

International Law	Polit	301	3 (3,0)
American Foreign Relations	Polit.	303	3 (3,0)
Public Administration	Polit.	305	3 (3,0)
Elective			3 (3,0)
Elective			3 (3,0)
1st Year Advanced R.O.T.C.			2 (3,0)
			17

SENIOR YEAR—

Constitutional Law	Polit.	401	3 (3,0)
International Politics	Polit.	405	3 (3,0)
Political Theory	Polit.	407	3 (3,0)
Elective			3 (3,0)
Elective			3 (3,0)
2nd Year Advanced R.O.T.C.			2 (3,0)
			17

*Represents semester hour credits, lectures, and laboratory hours in that sequence.

**Physics open only to those who score in upper 75% on Mathematics Achievement Test.

***Available to freshmen except political science majors.

POLITICAL SCIENCE MAJOR

Second Semester

FRESHMAN YEAR—

Composition and Literature	Engl.	102	3 (3,0)
Fundamental Mathematics	Math.	102	3 (3,0)
Biology, Chemistry, or Physics			4 (3,2)
Survey of American History		102	3 (3,0)
A Modern Language			3 (3,0)
1st Year Basic R.O.T.C.		102	2 (2,0)
			18

SOPHOMORE YEAR—

Major British Writers	Engl.	202	3 (3,0)
Economic Origins, Principles and Problems	B. Ad.	202	3 (3,0)
State & Local Government	Polit.	202	3 (3,0)
European Civilization Since 1500	Hist.	202	3 (3,0)
A Modern Language			3 (3,0)
2nd Year Basic R.O.T.C.		202	2 (2,0)
			17

JUNIOR YEAR—

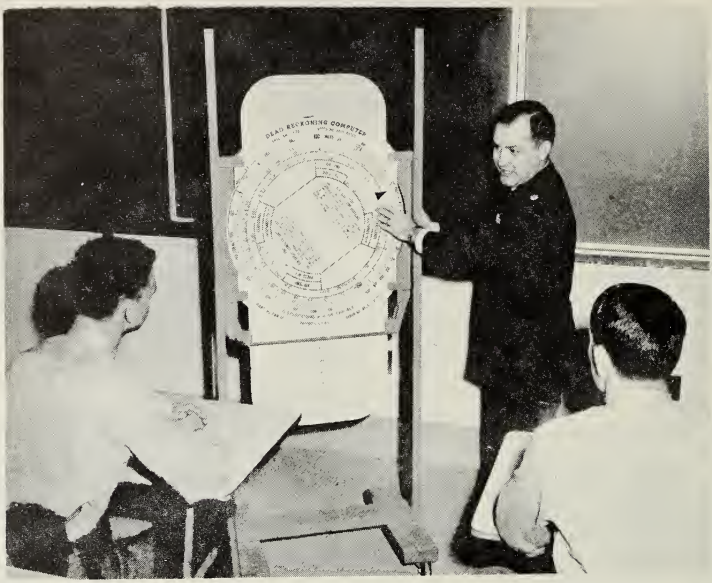
International Organization, or	(Polit.	302	3 (3,0)
Problems in International Law	(Polit.	308	
American Political Parties	Polit.	304	3 (3,0)
Comparative Politics	Polit.	307	3 (3,0)
Elective			3 (3,0)
Elective			3 (3,0)
1st Year Advanced R.O.T.C.			1 (3,0)
			16

SENIOR YEAR—

Constitutional Law	Polit.	402	3 (3,0)
International Politics, or	(Polit.	406	3 (3,0)
Urban Politics ****	(Polit.	413	
Political Theory	Polit.	408	3 (3,0)
Elective			3 (3,0)
Elective or Senior Research Project			3 (3,0)
2nd Year Advanced R.O.T.C.			1 (3,0)
			16

TOTAL HOURS — 136

****Urban Politics open to seniors in all departments and second semester political science juniors.



Flight Indoctrination Requires Preflight Planning

Department

of

Aerospace Studies

Professor of Aerospace Studies: Whitmire

Assistant Professors of Aerospace Studies: Bailey, Mavis, Johnson, Morgan, Tillman, Williams, Hannan, Mayo, DeMarco, Loren.

The mission of The Citadel's Air Force ROTC Detachment is to provide instruction, experience, and motivation to each cadet choosing the Air Force Program; and to insure that he possesses the knowledge, character, and qualities of leadership essential to his progressive development as a career officer and good citizen.

Modern weapons systems and technology in combination with a constantly changing world situation have removed the emphasis on "Reserve" from Air Force ROTC. The "Force-in-being" concept demands that the emphasis be on the dedicated career professional officer who accepts responsibility readily, thinks critically and creatively, writes and speaks effectively. The Air Force ROTC program at The Citadel has become a major source for this kind of officer. Each year approximately one hundred cadets receive their Air Force commissions at The Citadel. During the past several years The Citadel commissioned more second lieutenants than any other AFROTC detachment in the United States.

The Citadel Air Force ROTC cadet course of instruction in Aerospace Studies features a wide variety of instruction and training opportunities. During the freshman and sophomore years the curriculum is designed to provide students with an understanding of aerospace power's relation to national defense as well as aerospace power's past, present, and future role in world affairs. The course covers the nature of war and traces the development of aerospace power.

During the junior and senior years the Air Force ROTC Program draws on many academic disciplines, and deals with professionalism in leadership and management. It includes the meaning of professionalism, professional responsibility, the military justice system, leadership —its functions and practice, management principles and functions, and problem-solving.

Citadel graduates have served the Air Force and the Nation well in both war and peace. Today's Citadel cadets can be expected to assume important command and managerial positions in the Air Force's Aerospace Force of the future.

Formal Enrollment Requirements

General Military Course

1. Being a citizen of the United States.
2. Being physically qualified. The most frequent disqualifying item is failure to meet vision standards. Some minimum acceptance vision standards are: Pilot, 20/20 uncorrected in both eyes; Navigator, 20/50 correctable to 20/20 in both eyes; Non-rated, 20/400 correctable to 20/30 in one eye and 20/40 in the other.

3. Maintaining satisfactory academic standards.
4. Having good moral character. (Convictions by civil or military court for offenses other than minor traffic violations are disqualifying; excessive minor traffic violations may also cause disqualification.)
5. Signing a certificate of loyalty to the United States Government.

Professional Officer Course

1. Completion of the Basic Course.
2. Passing the physical requirements.
3. Passing Air Force Officer Qualification Test (AFOQT).
4. Contracting to serve on active duty for six years if qualified for pilot or navigator. Other categories are for four years.
5. Enlisting in the Enlisted Reserve of the Air Force for a specified period of time. A cadet who is selected for the Professional Officer Course under this program who willfully evades the terms of his Advanced Course contract, or who completes the course but declines to accept a commission when offered, may be ordered to active duty by the Secretary of the Air Force to serve in his enlisted grade for a period not to exceed two or four years depending on whether or not the cadet is enrolled under the AFROTC Scholarship Program. Under the latter program enlisted service may extend to four years.
6. Maintaining satisfactory academic standards and graduating with class.

Since four years of ROTC are required by The Citadel for graduation, any cadet not eligible for formal enrollment in the Professional Officers Course in accordance with the criteria given above, may take the POC course for academic credit only. A cadet in this category is not entitled to a subsistence allowance nor will he be offered a commission upon graduation.

Course of Instruction

Aerospace Studies 100. *World Military Systems* Four Credit Hours
(Freshman Year)

An introductory course exploring the doctrine, mission and organization of the Defense establishment of the United States with emphasis on the mission of the U. S. Air Force.

The course begins with a discussion of the doctrine, mission and organization of the United States Air Force. It continues with a discussion of the U. S. strategic offensive and defensive forces and covers in detail their mission and function to include the employment of nuclear weapons and civil defense. The role of the U. S. general purpose and aerospace support forces is then covered in relation to the tactical air forces; special attention is devoted to employment in

limited war. An average of not less than two classroom hours per week for the full academic year is required.

Aerospace Studies 200. *World Military Systems* Four Credit Hours
(Sophomore Year)

Aerospace Studies 200 is a continuation of the General Military Course dealing with the role of U. S. military forces in the contemporary world. This includes a survey of the defense policies of the United States. Theories of General War and the nature and context of limited war are discussed as are the policies and strategies of the Soviet Union and Communist China and the role of alliances in U. S. defense policies. The second semester is devoted to a study of defense organization and the decision making process. This study includes the organization and function of the Department of Defense, the role of the military in national policy and the elements and process of defense decision making. Two semester hours per week are required.

Aerospace Studies 300. *Growth and Development of Aerospace Power* Three Credit Hours

A study of the changing nature of military conflict; development of air power in the United States; mission and organization of the United States Air Force within the Department of Defense (DOD); Air Force concepts, doctrine and employment; astronautics and space operations; and the future aerospace power. Included are the United States space programs, vehicles, systems and problems in space exploration. Three class hours per week are required.

Aerospace Studies 400. *The Professional Officer* Three Credit Hours
(Senior Year)

A study of professionalism, leadership, and management. Includes the meaning of professionalism, professional responsibilities, the military justice system, leadership theory, functions and practices, management principles and functions, problem solving, and management tools, practices and controls. Three class hours per week are required.

AFROTC ACTIVITIES

Field Training

Normally during the summer between their junior and senior years, Citadel Cadets enrolled in AFROTC are required to attend a four-week field training course at an Air Force Base. To most cadets this is a memorable experience, for here the cadet gets a closeup look at Air Force life and realistic operations. Each cadet receives practical guidance in aircraft and aircrew indoctrination, small arms familiarization, physical training, survival training, career officer orientation, as well as training in many other areas needed by the Air Force Professional.

Flight Instruction Program

In Air Force ROTC, FIP spells flying. All qualified senior cadets interested in becoming Air Force pilots participate in the Flight In-

struction Program (FIP). Those who complete this program and pass the Federal Aviation Agency (FAA) examination and the flight check are eligible to receive their private pilots license . . . all at Air Force expense.

Each potential pilot receives up to 36½ flying hours at an FAA approved flying school located near The Citadel. This includes twenty hours of dual flying instruction and 16½ hours of solo time. Aircraft with engine ratings between one hundred and two hundred horsepower are used in the program. The ground school portion, including weather, navigation, and federal air regulations, is taught by Air Force Pilots in the AFROTC classrooms. FIP is a highly motivating experience for cadets, serving as an excellent test of the cadet's aptitude and interest in flying.

Field Trips

The vast scope of the United States Air Force is difficult to portray in the classroom. In partial compensation, the Air Force ROTC detachment at The Citadel takes selected cadets to the Air Force—in the form of field trips to Air Force bases. On these trips the cadets receive briefings on base activities, observe firsthand Air Force operations and, as a highlight, are given an orientation ride in a large jet transport. The cadet returns to school with a more accurate perspective of the global nature of the organization in which he will serve. Experience has shown that these visits are of considerable value in developing a cadet's appreciation of the challenging Air Force officer's career that lies ahead.

Air Force ROTC Distinguished Graduate Program

The Air Force ROTC Distinguished Graduate Program provides an opportunity for highly qualified cadets to be selected for appointment in the Regular Air Force.

The Professor of Aerospace Studies may designate as Distinguished Graduates, those seniors who possess outstanding qualities of leadership and have demonstrated these qualities both in their academic classwork and military activities. Distinguished Graduate status is a necessary prerequisite for Regular appointment. Twice each year a review board is convened at Headquarters AFROTC to consider candidates nominated by the PAS for Regular appointments. Distinguished Graduates not initally selected for regular appointment will retain the Distinguished Graduation identification for subsequent consideration after they have entered the Air Force.

ROTC ALLOWANCES

Uniform Allowance

Students formally enrolled in Aerospace Studies I and II are paid

by the Government $30 per semester as a uniform allowance. Fourth classmen (freshmen) and third classmen (sophomores) must be enrolled at least through the sixth week to receive this allowance. Students formally enrolled in the Advanced Course are paid $48 per semester as a uniform allowance. The above uniform allowances are not paid directly to the students but are credited to the students' comptroller accounts.

Subsistence Pay

A cadet selected for the Professional Officer Course will be provided subsistence pay at the rate of $50 per month beginning on the day he starts advanced training and ending upon the completion of his instruction, but in no event shall any cadet receive such pay for more than twenty months.

AFROTC College Scholarship Program

To attract top-quality students, Air Force ROTC is authorized to grant up to 5,500 scholarships, which give selected cadets full tuition, laboratory fees, incidental fees, and allowance for books. Additionally, they are paid a subsistence of $50 per month. Selections are made on the basis of the cadet's college grades and officer aptitudes as reflected by the Air Force Officers Qualifying Test, demonstrated performance, and an interview by an Air Force officer. At the present time The Citadel has twenty-five AFROTC Cadets receiving AFROTC College Scholarships.

Future Scientists

Department

of

Biology

Professor: Timmerman
Associate Professors: Baldwin, Runey, Crosby
Assistant Professors: Kelley, Seabury, Bowman, Forsythe

Biology is the study of living things. No matter what a student's vocational goal may be, he will be able to live a more complete and happy life if he is familiar with the phenomena and laws of nature. Biology helps us to appreciate and understand nature and its laws.

The purpose of the Department of Biology is twofold. First, the department seeks to prepare its majors for advanced study in their chosen areas of specialization. Second, the Department of Biology makes available a variety of courses to non-science majors who desire them as electives. Sufficient flexibility is provided in the curriculum to satisfy the needs of all groups. Emphasis at the undergraduate level is on unifying principles applicable to broad areas of biological study. Basic courses provide a foundation for further study while electives from the adavanced group of courses will satisfy the special needs of the individual student.

Graduate School, Premedical, Predental, and *Preveterinary Preparation.*

Students must not only complete the prescribed work to qualify themselves for professional schools, but they must obtain a satisfactory score on the aptitude tests which are required by the various professional schools.

Unusually well qualified students who wish to apply for early admission to professional schools may arrange a special program, subject to approval by the department head. This program should be planned to meet the minimum requirements of the particular professional school to which the student is applying.

Students are cautioned that the professional schools impose higher than normal admission standards upon applicants from the sophomore or junior class levels. Also, if admission is not achieved, it may be difficult to schedule a program of study to meet the requirements for graduation from The Citadel in the normal four years.

Master of Arts in Teaching (MAT)

The board aim of the program for the Master of Arts in Teaching including a major or minor in Biology is to give the secondary school teachers a better understanding of the many marvelous properties and abilities of living things. This program will promote the cultural and professional growth of the secondary and junior college teachers. The biology faculty proposes to develop men and women with scholarly and human interest who are able to meet the growing challenge of modern education.

Courses required for a major or minor in Biology are as follows: Biology 501, 502, 503, 504 or 507, and 506 are required in the

total of 18-21 hours for a major. Biology 501 is required in the total of 9-12 hours for a minor. See Graduate School Catalog for description of various graduate courses.

B.S. Biology Major

The ever increasing importance of biological science, and the attractive career opportunities which require a biological science background caused The Citadel to open a Department of Biology and to offer a B.S. Biology course of study. There are a number of electives in the program which permit flexibility in training for various goals such as graduate study in biology; admission to medical, dental, or veterinary professional school; secondary school science teaching preparation; social work; wildlife conservation, or drug or biological selling.

For graduation the candidate must have at least 33 credits in biology. Biology 103, 104 and 411 are required of majors. The other course requirements will be worked out in consultation with the department head or faculty advisor, but he seven remaining biology electives should include at least one course in the following areas: *Physiology;* 205, 403, 404; *Field Biology;* 210, 406, 409, 410, and *Developmental Biology;* 208, 308, 401. Two courses should be in the area, *Descriptive Biology* 301, 302, 310, 312, 315, 402, 405, 418. It is strongly recommended that each biology major take at least one advanced botany and one advanced zoology course in addition to Biostatistics. Also required are 16 credits in Chemistry: 101, 102, 303, and 304; 15 credits in English: 101, 102, 201, 202, and 205; 12 credits in Physics: 205, 206, and 207; 6 credits in History: 101 and 102; 6 credits in either French, German, or Russian above the 100 level courses, and 6 credits in Mathematics.

Eight (8) semester hours of science (biology, chemistry, or physics) is required for the non-science majors entering the freshman class in September, 1968.

Course Descriptions for Biology

103. *Introduction to Botany* Four Credit Hours

An introduction to the plant kingdom; the structure, life processes, reproduction, heredity, evolution, classification and biological significance of plants.

Lecture: three hours per week; laboratory: two hours per week.

104. *Introduction to Zoology* Four Credit Hours

An introduction to the animal kingdom; the structure, life processes, reproduction, heredity, evolution, classification, and biological significance of animals.

Lecture: three hours per week; laboratory: two hours per week.

205. *Cell Biology* Three Credit Hours

Elective to all majors

An introduction to the morphological, biochemical, and biophysical properties of protoplasm and their significance in the life processes.

Lecture: three hours a week.
Prerequisite: Introduction to Botany 103 and Introduction to Zoology 104.

208. *Evolution* Three Credit Hours
Elective to all majors

A basic course in the concepts of evolution and population dynamics. The history of evolutionary thought, the processes of organic evolution and systematics are considered.

Lecture: Three hours a week.
Prerequisite: Introduction to Botany 103 and Introduction to Zoology 104.

210. *Plant Taxonomy* Four Credit Hours

An introductory study of local flora, emphasizing the identification and taxonomy of local flowering plants.

Lecture: Two hours per week; Laboratory: Four hours per week.
Prerequisite: Introduction to Botany 103.

301. *Invertebrate Zoology* Four Credit Hours
Elective to all majors.

A general study of the invertebrate animals including taxonomy, morphology, and ecology.

Lecture: Two hours a week; Laboratory: Four hours per week.
Prerequisite: Introduction to Zoology 104.

302. *Comparative Vertebrate Anatomy* Four Credit Hours
Elective to all majors.

Comparative anatomy of certain vertebrate forms.
Lecture: Two hours a week; Laboratory: Four hours a week.
Prerequisite: Introduction to Zoology 104.

303. *Human Anatomy* Three Credit Hours
Required of majors in physical education and elective to majors other than biology majors.

Foundation material in mammalian anatomy which has been designed to give an understanding of basic human anatomy.

Lecture: Three hours a week.
Prerequisite: Introduction to Zoology 104.

304. *Human Physiology* Three Credit Hours
Elective to majors other than biology majors.

An introduction of the basic physics and chemistry of life including a study of the machinery of the regulatory mechanisms of the human body.

Lecture: Three hours a week.
Prerequisite: Introduction to Zoology 104.

305. *Human Anatomy Laboratory* One Credit Hour
Elective to majors other than biology majors.

Laboratory exercises to illustrate the relationships of structure of mammalian anatomy.

Laboratory: Three hours a week.
Prerequisite: Introduction to Zoology 104.

306. *Human Physiology Laboratory* One Credit Hour
Elective to majors other than biology majors.

The experimental approach will be emphasized, and students will conduct experiments demonstrating the various physiological process of life.

Laboratory: Three hours a week.
Prerequisite: Introduction to Zoology 104.

308. *Genetics* Three Credit Hours
Elective to all majors.

This course presents in a relatively nontechnical manner the basic facts essential for an understanding of the mode of inheritance in plants and animals with the major emphasis on animals. It is strongly suggested by many medical colleges.

Lecture: Two hours a week; Laboratory: Two hours a week.
Prerequisite: Introduction to Zoology 104 or approval of Department Head.

310. *Microbiology* Four Credit Hours
Elective to all majors.

A general study of microorganisms and their importance to man with special emphasis on their fundamental life processes. Includes a brief introduction to epidemiology and immunology.

Lecture: Two hours a week; Laboratory: Four hours a week.
Prerequisite: Introduction to Botany 103.

312. *Biostatistics* Three Credit Hours
Elective to all majors.

An elementary statistics course with an introduction to fundamental procedures in collection, analysis, and presentation of biological data. It includes measures of central value and dispersion, sampling, and tests of significance in research studies.

Lecture: Three hours a week.

Prerequisites: Mathematics 102 or 119 or approval of Department Head.

315. *Plant Morphology* Four Credit Hours

The study of the external forms, life histories, evolutionary trends and economic importances of the lower and higher members of the plant kingdom.

Lecture: Two hours per week; Laboratory: Four hours a week.
Prerequisite: Introdution to Botany 103.

401. *Embryology* Four Credit Hours
Elective to all majors.

Embryology of representative vertebrates, including the amphibian and bird, and additional material on mammals.

Lecture: Two hours a week; Laboratory: Four hours a week.

Prerequisite: Introduction to Zoology 104.

402. *Descriptive Histology* Three Credit Hours
Elective to all majors.

A detailed study of the chief types of animal tissues and a description of the histology or organs. Laboratory work includes microscopic study of cells, tissues and organs of animals, and training in the preparation of microscopic slides.

Lecture: Two hours a week; Laboratory: Two hours a week.

Prerequisite: Introduction to Zoology 104.

403. *Mammalian Physiology* Four Credit Hours
Elective to all majors.

A systematic study of the general physiology of skin, skeleton, muscle, nervous system, special senses, digestive, circulatory and respiratory systems, kidney function, hormonal control, and reproduction.

Lecture: Three hours a week; Laboratory: Three hours a week.

Prerequisite: Introduction to Zoology 104 and Organic Chemistry 304.

404. *Plant Physiology* Four Credit Hours

A comprehensive study of the physiological processes of living plants. This course is designed to include both inorganic and organic metabolism while emphasizing the relationships of these processes to the entire plant.

Lecture: Three hours a week; Laboratory: Three hours a week.

Prerequisites: Introduction to Botany 103 and Cell Biology 205.

405. *General Parasitology* Three Credit Hours
Elective to all majors.

Taxonomy, morphology, adaptation, and ecology of parasites affecting man and domestic animals. Life history, vectors, and controls are emphasized.

Lecture: Two hours a week; Laboratory: Two hours a week.

Prerequisite: Introduction to Zoology 104.

406. *Animal Ecology* Three Credit Hours
Elective to all majors.

An introduction to the study of biological interrelationships and the effects of the environment on the structure and function of animal populations. Laboratory will emphasize methods and materials of ecological investigations.

Lecture: Two hours a week; Laboratory: Two hours a week.

Prerequisite: Introduction to Zoology 104.

409. *Marine Biology* Four Credit Hours
Elective to all Juniors and Seniors.

The lecture would cover major ecological factors and the fundamentals of oceanography. Laboratory work stresses the familiarities with species, taxonomic methods, sampling procedures, experimental design, use of equipment and data handling.

Lecture: Two hours a week; Laboratory: Four hours a week from 1-5 on Monday or Wednesday.

Prerequisite: Introduction to Botany 103 and Introduction to Zoology 104. Biostatistics 312 is recommended but not required.

410. *Vertebrate Natural History* Three Credit Hours

An introduction to the classification, ecology, evolution and distribution of the vertebrates. Laboratory with emphasis on identification and field study techniques, especially with respect to the vertebrates of South Carolina.

Lecture: Two hours a week; Laboratory: Three hours a week.

Prerequisite: Introduction to Zoology 104.

411. *Senior Seminar* One Credit Hour
Required of all biology majors.

A group study of current topics of biological interest.

Lecture: One hours per week.

418. *Plant Anatomy* Four Credit Hours

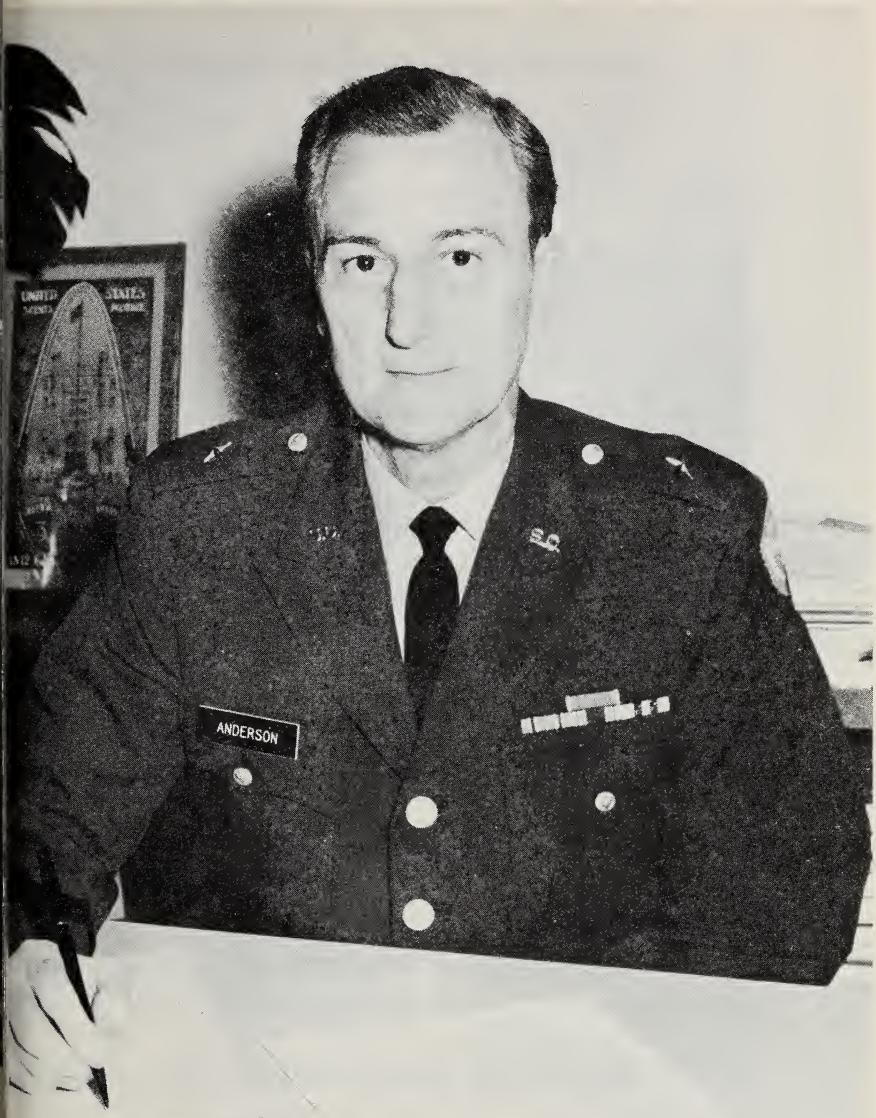
An examination of cell types and tissue systems found in the vegetative and reproductive organs of vascular plants with reference to their origin, classification and function. The laboratory will include practice in the methods and procedures of plant microtechnique.

Lecture: Two hours per week; Laboratory: Four hours per week.

Prerequisite: Introduction to Botany 103.

420. *Senior Research Project* Three Credit Hours
Independent study in undergraduate research for serious students planning graduate study.

Prerequisite: Permission of Department Chairman and supervising instructor.



GENERAL WALLACE E. ANDERSON
Academic Dean

Future Business Leaders

Department

of

Business Administration

Professors: Adden, Tibbetts, Mettler, Young
Associate Professors: Infinger, Kuhlman, Whitney, Wilson, Masters, Stockton
Assistant Professors: Lucas, Marjenhoff, Buckley, Wittschen, Rebber, Mahoney, Brown, Bernthal, Dobbs

Modern business has become so large in the size of industrial units and so complex in organization that a mastery of its theory and practice can no longer be acquired through apprenticeship. Today no single industry or business can give so adequate a training to its beginners as can be obtained in the department of business administration of a good college. Such college training is now considered the best method of equipping a man for success as a business and economic leader.

The purpose of the Department of Business Administration is to prepare the student to take his place in a business enterprise with such general knowledge of business that he can forego many of the years of experience which would be required of an apprentice, to prepare him to enter in full standing the graduate schools of business administration, to pursue further professional business studies, and to take his place in economic society as does a professional man in other fields of endeavor with sufficient knowledge to make sound decisions on economic problems.

The courses described below are not all pure business courses; rather they are designed to offer instruction in subjects commonly given in schools of arts and science, in schools of social science, and in schools of business administration.

201. *Economic Origins and Principles* Three Credit Hours
Required of all Business Administration Sophomores.

A study of the origins of capitalism and the development of economic institutions: an introduction to economic principles, including an analysis of the determination of national income and its fluctuations, an introduction to money, banking, and government finance.

202. *Economic Principles and Problems* Three Credit Hours
Required of all Business Administration Sophomores.

A study of value and price, including factors affecting short and long-run adjustments of the individual firm with respect to prices, costs, and levels of production; value and price determination; market adjustments in competition and monopoly; distribution of income; and current economic problems. Prerequisite: B.Ad. 201.

203. *Economics of American Industries* Three Credit Hours
Elective for Non-Business Administration Majors.

A study of how wealth comes into existence from raw materials; the location, the quantity, the quality, the values before and after manufacturing; manufacturing processes; relative importance to economic society.

204. *Business Psychology*
Elective for Non-Business Administration Majors.

Applied psychology as an aid to the business executive; statistical measures as an aid to the psychologist; vocational psychology; industrial psychology, including an understanding of employee behavior patterns through the adjustment concept, psychological testing, selection, and performance appraisal.

205. *Business Statistics I* Three Credit Hours
Required of all Business Administration Sophomores.

This course deals with the organization of statistical inquiry and the presentation of its results in tabular and graphic form. Also covered are frequency distributions (with emphasis on the normal), measures of central tendencies, measures of dispersion, theories of sampling and probability, time series, and index numbers.
Prerequisite: Completion of Required Freshman Mathematics.

206. *Business Statistics II* Three Credit Hours
Elective for Business Administration Majors and others.

A continuation of Business Statistics 205, including an introduction to T, Poisson, and Chi-square distributions, tests of significance, regression and correlation analysis, simple and multiple correlation, as well as a more sophisticated exploration of sampling and probability theory.
Prerequisite: B.Ad. 205.

303. *Accounting Principles and Practice I* Three Credit Hours
Required of all Business Administration Juniors.

A study of the fundamentals of accounting, including the analysis and recording of business transactions and the preparation of financial statements; practical problems given in the laboratory. Lecture: two hours; laboratory: two hours.

304. *Accounting Principles and Practice II* Three Credit Hours
Required of all Business Administration Juniors.

A continuation of B.Ad. 303 with emphasis on partnerships, corporations, cost accounting theory, modern methods of data processing, and the Statement of Sources and Application of Funds.
Lecture: two hours; laboratory: two hours.
Prerequisite: B.Ad. 303.

305. *Business Law* Three Credit Hours
Required of all Business Administration Juniors.

A study of the law as it relates to business, including contracts, agency; negotiable instruments, sales, bailments, and personal and real property; class discussion of court procedure, cases, and decisions.

306. *Business Organization and Finance* Three Credit Hours
Required of all Business Administration Juniors.

A survey of forms of business organization and of business financial policies and methods of planning and control; an analysis of the factors

affecting the capital structure of corporations and the proper use of different types of securities; budgetary procedures.
Prerequisites: B. Ad. 303 and 305.

307. *Principles of Labor* Three Credit Hours
Required of all Business Administration Juniors.

An analysis of the worker's position in modern industry and the effects of industrial production on the worker's social position; introduction to the problems of wages, hours, working conditions, child labor, industrial accidents, unemployment, trade unions, and collective bargaining; economic problems of the worker under current labor legislation.
Prerequisite: B. Ad. 202.

308. *General Insurance* Three Credit Hours
Elective for Business Administration Majors and others.

A course in predictable business risks and the methods of minimizing these risks through insurance; intelligent planning of a program of coverages, and rates of life, fire, casualty, marine insurance, and fidelity and surety bonds.

309. *Marketing Principles* Three Credit Hours
Required of all Business Administration Juniors.

The activities necessary to affect the distribution of goods from producer to consumer, consumption and consumer behavior, the marketing institutions, the marketing functions, examination of important marketing policy and problem areas.
Prerequisite: B. Ad. 202.

310. *Foreign Trade* Three Credit Hours
Elective for Business Administration Majors.

The channels of distribution used in exporting and importing, the theory of international trade, foreign trade promotion activities; the commercial organization and policies governing foreign trade practices; trade methods and problems; financial arrangements.
Prerequisite: B. Ad. 202.

311. *Government Finance* Three Credit Hours
Required of all Business Administration Juniors.

A study from the point of view of the businessman of the amount and purposes of government expenditures; scope of government financial activity; public budgets; principles of public borrowing; sources of revenue; theories of tax distribution; general principles and practices of property taxes, commodity taxes, income taxes, corporation and other business taxes.
Prerequisite: B. Ad. 202.

312. *Taxation* Three Credit Hours
Required of all Business Administration Seniors.

A study of the basic principles of income taxation, including a

thorough analysis of the present federal law dealing both with persons and corporatons.
Prerequisite: B. Ad. 303.

314. *Intermediate Economics* Three Credit Hours
Elective for Business Administration Majors and others.
A course designed to give the student a comprehensive understanding of national income, its measurement and analysis, including a study of business cycles, economic growth, and economic policies.
Prerequisite: Economics 202.

316. *Communicating in Business* Three Credit Hours
Elective for Business Administration majors and others.
A study of communication in business as related primarily to the writing of business reports, research procedures and business letters. The course is designed to stress clarity, conciseness, and logical presentation.
Prerequisite: Economics 202.

400. *Intermediate Accounting* Three Credit Hours
Required of all Business Administration Seniors.
An analysis of the balance sheet and the income statement with particular emphasis on the technique of evaluation of items comprising these statements; practical problems given in the laboratory.
Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 304.

401. *Industrial Accounting* Three Credit Hours
Elective for Business Administration Majors.
A course in the principles of industrial accounting, including the accounting for materials, labor, and overhead under the job-order, process, and standard cost systems; practical problems given in the laboratory.
Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 400.

402. *Advanced Accounting Problems* Three Credit Hours
Elective for Business Administration Majors.
A study of advanced accounting problems, including the technical procedures in the organization and liquidation of partnerships; special problems in mergers and consolidations, estates, trusts, and receiverships; practice problems done in the laboratory. Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 400.

403. *Corporate Financial Management* Three Credit Hours
Required of all Business Administration seniors.
Principles and practices of the financing of non-financial corporations; emphasis on the role of the finance executive in a business or-

ganization; problems and cases to demonstrate solutions to managerial decisions involving cash flow and capital structure analysis.
Prerequisites: B. Ad. 304 and 306.

404. *Investments* Three Credit Hours
Elective for Business Administration Majors.

A study in personal finance and security analysis: buying and selling procedure; stock exchanges; and the relative merits of the various types of securities as an investment or speculation.
Prerequisites: B.Ad. 403.

405. *Marketing Management* Three Credit Hours
Required of all Business Administration Seniors.

Marketing management primarily for the manufacturer; planning the product; planning for promotion; investigation of the market; pricing and price policy; planning the sales organization; management of sales personnel.
Prerequisite: B. Ad. 309.

406. *Transportation* Three Credit Hours
Elective for Business Administration Majors.

A study of the history, geography, and economics of all forms of transportation; transport pricing; public regulation: public policy; current problems such as competition between modes of transportation.
Prerequisite: B. Ad. 405.

407. *Money and Banking* Three Credit Hours
Required of all Business Administration Seniors.

The nature and functions of money; the various monetary standards; the development of our monetary system; the factors affecting the value of money; methods and objectives of money and credit control; international exchange; analysis of recent development in money and credit.
Prerequisite: B. Ad. 311.

408. *Bank Management* Three Credit Hours
Elective for Business Administration Majors.

A study of the development and structure of the commercial banking system; a description and analysis of the operations of our commercial banks and an investigation of the techniques and principles followed by commercial banks in the performance of their many functions.
Prerequisite: B. Ad. 407.

409. *Personnel Management* Three Credit Hours
Required of all Business Administration Seniors.

The principles and practices in the management of employees; introducing positive stimuli into industrial endeavors and promoting the industrial efficiency of labor, treating such factors as selection and placement, training programs, job analysis, labor turnover, merit rating, job evaluation, and wage analysis.
Prerequisite: B. Ad. 307.

410. *Production Management* Three Credit Hours
Required of all Business Administration Seniors.

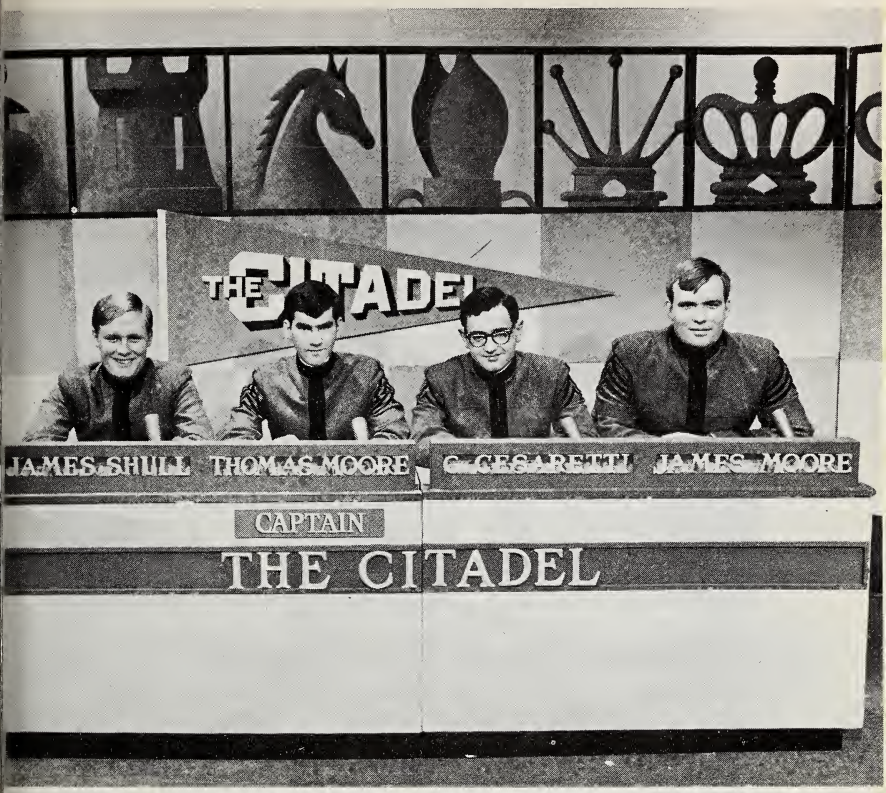
The problems of the production manager: location and design of plants; internal and external transportation; inventory control; methods of measuring activities of personnel: incentives, efficiencies, budgets, and organization.

Prerequisites: B. Ad. 202, 205, and 304.

414. *Data Processing* Three Credit Hours
Elective for Business Administration Majors.

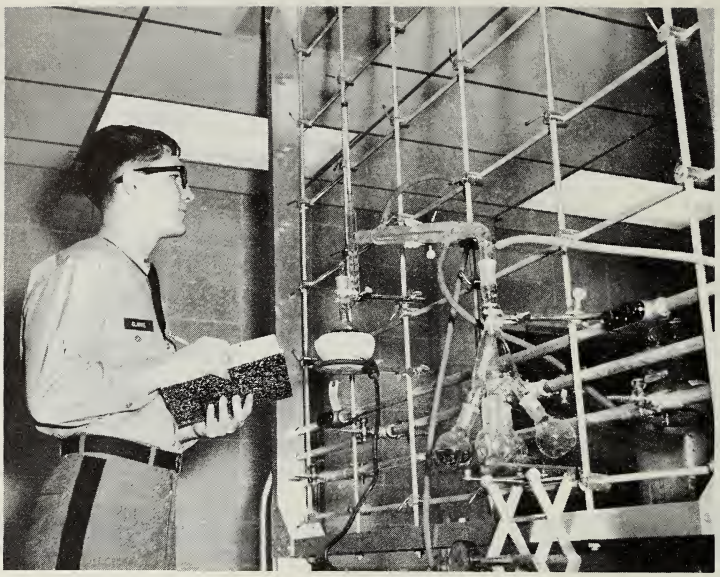
An introduction to business information processing systems, including the fundamentals of data processing, systems of data processing, methods and equipment used in processing systems, and relationships of data processing systems to the management function; emphasis on modern systems utilizing electronic computers.

Prerequisites: B. Ad. 304, and E.E. 203.



The Citadel's G. E. College Bowl Scoreboard:

First Round:	*The Citadel*	*185*
	Claremont Men's College	*165*
Second Round:	*The Citadel*	*225*
	Manhattan College	*135*
Third Round:	*The Citadel*	*150*
	Wyoming University	*205*



Learning Modern Technique of Separating Chemical Mixtures

Department

of

Chemistry

Professors: Wilkinson, Hummers, Ballentine, Jumper
Associate Professors: Medbery, Leopold, Durkee
Assistant Professors: Browning, Wagener, McNew, Rushing, Braun

The objectives of this department are:

1. to offer to all freshmen majoring in the sciences or engineering a course in the fundamentals of general chemistry, and to others majoring in the arts, business, and education a terminal course of elementary general chemistry.
2. to provide for students majoring in chemistry a B.S. in Chemistry curriculum which will meet the educational requirements of the American Chemical Society for the professional chemist.
3. to offer an A.B. in Chemistry curriculum to accommodate:
   a. candidates for admission to medical, dental, and veterinary schools.
   b. candidates for high school chemistry teaching certification
   c. men seeking careers employing chemical training as a background.

B.S. Chemistry Major

The course of study for students majoring in chemistry is designed to prepare them to fill positions as chemists in commercial laboratories or as control chemists in industrial plants, and to provide the basic training for them to enroll as graduate students in full standing at the leading universities.

The courses of study embody training in the four fundamental subdivisions of the science: inorganic, organic, analytical, and physical chemistry.

The department occupies Byrd Hall, completed in 1968, containing 52,000 square feet, classrooms, a lecture theater, sixteen laboratories, a centrally located departmental library and conveniently located stockrooms, preparation rooms, and balance rooms.

A chapter of Student Affiliates of the American Chemical Society is active at The Citadel.

Students majoring in the B.S. Chemistry Program are required to take all of the courses offered by the department for Chemistry Majors and also Mathematics 131, 132, 231, 232; German 101, 102 and 203, 204, and Physics 110, 211, and 212.

Premedical, Predental, and Prepharmacological Preparation

Students who plan to qualify themselves for admission to these professional schools may choose either the B.A. Chemistry or the B.S. Biology courses of study. Those electing the B.A. Chemistry degree should take: General Biology (201-202), Comparative Anatomy (301), and Vertebrate Embryology (401), and it is strongly recommended that they take if possible: Genetics (308), Histology (402), General Physiology (403), General Psychology (301), Abnormal Psychology (304), and Mathematics 201 and 202. Those electing the B.S. Biology

degree should take: Quantitative Analysis (202), Survey of Physical Chemistry (301), and it is strongly recommended that they take if possible: General Psychology (301), Abnormal Psychology (304), and Mathematics 201 and 202.

A student must not only complete certain prescribed work for admission to a medical college but must show also an aptitude for medical studies. The Medical Aptitude Test, prepared by the Association of American Medical Colleges, must be taken by all students who expect to apply for admission to a medical college.

A.B. Chemistry Major

A number of students may wish to pursue higher education in medicine, dentistry, or veterinary medicine; or a career in secondary school chemistry teaching, or other areas which use a background of chemical training. The department offers an A.B. Chemistry course of study which permits many electives and great flexibility to the student to select courses which will provide him with the particular education suited to his needs. The candidate must take 32 credits in chemistry, namely 101, 102, 111, 112, 202, 301, 303, 304, 420 or an approved chemistry elective, and two chemistry electives; 15 credits in English, namely 101, 102, 201, 202, and 205; 12 credits in physics, namely 205, 206, and 207; Mathematics 101, 102; History 101, 102; 12 credits in either French, German, or Russian; and 42 credits in approved electives.

Requirements for Non-Science Students

Non-science students, in order to complete the requirements for a physical science in chemistry, must complete a four course set, i. e., Chemistry 101, 111, 102, and 112 or Chemistry 101, 111, 104, and 114.

101. *General Chemistry* Three Credit Hours

Required of all freshmen majoring in the sciences, engineering or mathematics, elective to others.

Theoretical and descriptive chemistry, including the elements of modern chemical theory and discussion of some of the more common industrial processes. Slide rules are required.

Lectures and recitations: three hours a week

Corequisite or Prerequisite: Chemistry 111.

102. *General Chemistry* Three Credit Hours

Required of all freshmen majoring in mathematics, engineering or the sciences, elective to others.

A continuation of 101 with emphasis on the theoretical aspects of chemistry and discussion of some of the more common industrial processes. Slide rules are required.

Lectures and recitations: three hours a week.

Prerequisite: Chemistry 101.

104. *Introduction to General Chemistry* Three Credit Hours
Elective for non-science majors.

A terminal course designed for students who do not expect to take any other course in chemistry. The principles of chemistry and methods of science applied to experiences in daily life; less comprehensive than Chemistry 102. Slide rules are required.
Lecture: three hours a week.
Prerequisite: Chemistry 101.
Corequisite or Prerequisite: Chemistry 114.

111. *General Chemistry Laboratory* One Credit Hour
Required of all freshmen majoring in the sciences, engineering, or mathematics; elective to others.

This laboratory course closely parallels the lecture material in Chemistry 101. Emphasis will be placed on quantitative experiments showing the stoichiometric relationships in chemical reactions. Two hours a week.
Prerequisite or Corequisite: Chemistry 101.

112. *General Chemistry Laboratory* One Credit Hour
Required of all freshmen majoring in the sciences, engineering, or mathematics.

The precipitation, separation, and identification of the common cations encountered in qualitative analysis. Two hours a week.
Prerequisite or Corequisite: Chemistry 102.
Prerequisite: Chemistry 111.

114. *Introduction to General Chemistry Laboratory* One Credit Hour
Elective for non-science majors.

This laboratory course embodies experiments designed to illustrate the lecture work in Chemistry 104; emphasis on basic laboratory techniques and on quantitative experiments showing the stoichiometric relationships in chemical reactions. Two hours a week each semester.
Prerequisite or Corequisite: Chemistry 104.
Prerequisite: Chemistry 111.

115. *Introductory Principles of Chemistry* Four Credit Hours
A one semester course covering the basic concepts and principles of chemistry which are essential to health science.
Lecture and recitations: three hours a week; laboratory: two hours a week.

116. *Introductory Organic and Biochemistry* Four Credit Hours
A one semester course covering the basic concepts of organic chemistry and serving as an introduction to biochemistry.

Lecture and recitations: three hours a week; laboratory: three hours a week.

202. *Quantitative Analysis* Four Credit Hours
Required of all sophomores majoring in chemistry, elective to others.

The theory and practice of quantitative analysis, with emphasis on volumetric determinations. Instruments will be used for some procedures.

Lectures: Two hours a week; laboratory: four hours a week.

Prerequisites: Chemistry 102, 112, Math 102 or equivalent, or permission of the department head.

301. *Survey of Physical Chemistry* Three Credit Hours

Required of all A.B. Chemistry majors, elective to others. Not open to B.S. Chemistry majors.

An introduction to the principle topics of physical chemistry, with emphasis on those topics related to life processes.

Lecture: three hours a week.

Prerequisites: Chemistry 102, 112, Math 102 or equivalent. (Chemistry 202 is recommended, but not required.)

302. *Instrumental Methods* Four Credit Hours

Required of all juniors majoring in B.S. Chemistry; elective to others.

The theory and practice of methods involving such instruments as colorimeters, electrophotometers, infrared, visible and ultraviolet spectrophotometers, polarographs, pH meters, titrimeters, electrodeposition apparatus, recorders, vapor phase chromatographs, gamma ray scintillation spectrometer, calorimeters, and other modern instruments including those used for detecting and measuring radioactive materials.

Lectures: two hours a week; laboratory: four hours a week.

Prerequisites: Chemistry 305. Corequisite: Chemistry 306.

303, 304. *Organic Chemistry* Four Credit Hours Each Semester

Required of all juniors majoring in Chemistry and Biology. A study of the aliphatic and aromatic series of hydrocarbons and their derivatives with emphasis on reaction mechanisms and interconversions among the various classes of compounds.

Prerequisites: Chemistry 202 or at least a C grade upon the first enrollment in Chemistry 102; or permission of the department head.

Lecture: three hours a week.

Laboratory: three hours a week.

305, 306. *Physical Chemistry* Three Credit Hours Each Semester

Required of all juniors majoring in B.S. Chemistry; elective to others.

A study of the properties of solids, liquids, and gases, and of their relation to chemical constitution.

Lecture: three hours a week.

Prerequisites: Chemistry 202, Mathematics 232 or 202, and Physics 211 or 206.

308. *Chemical Literature* One Credit Hour

Required of all juniors majoring in B.S. Chemistry; elective to others.

An introduction to the effective use of chemical literature. One lecture hour a week.

309. *Special Topics in Analytical Chemistry* Three Credit Hours
An elective course designed to familiarize students with the entire field of analytical chemistry with emphasis on modern methods of analysis.
Lecture: three hours a week.
Prerequisites: Chemistry 202, Physics 206 or 211.

310. *Survey of Nuclear Science* Three Credit Hours
Not open to Physics majors.
A survey of the field of nuclear science particularly as applied to chemistry. Elective course.
Lecture: three hours a week.
Prerequisites: Chemistry 202, Math 102 or equivalent, Physics 206 or equivalent, or permission of the department head.

311. *Nutrition* Three Credit Hours
Required of majors in health science.
Principles of normal nutrition and their adaption in meeting the needs of individuals and groups; including a study of the major food groups, their main sources, availability, and relative costs.
Lecture: three hours a week.
Prerequisites: Biology 101 or Biology 201, and Chemistry 116 or 102.

312. *Chemical Bonding and Structure* Three Credit Hours
Not open to B.S. Chemistry majors; elective to others.
A one semester course designed to introduce the student qualitatively to the modern thoughts concerning the basic theoric and rules governing chemical bonding and molecular structure. A simplified discussion of bonding in the simple organic and inorganic compounds as well as some complex inorganic ions.
Lecture: three hours a week.
Prerequisites: Chemistry 102, 112 and Math 102.

315, 316. *Physical Chemistry Laboratory* One Credit Hour Each Semester
Required of all juniors majoring in B.S. Chemistry; elective to others.
This laboratory course is closely correlated with the lecture work in Chemistry 305-306. It is designed to provide an introduction of the basic laboratory methods of Physical Chemistry, and to illustrate principles of thermodynamics, equilibrium and kinetics.
Laboratory: three hours a week.
Prerequisite or Corequisite: Chemistry 305, 306.
Prerequisite: Mathematics 232.

401, 402. *Inorganic Chemistry* Three Credit Hours
Required of all seniors majoring in B.S. Chemistry; elective to others.
A study of the principles and reactions of inorganic chemistry; atomic theory, valence, chemical bonds, the periodic system, acid-base theories, complex ions, radio-activity and nuclear relationships.

Lectures: three hours a week.
Prerequisites: Chemistry 304 and 306.

403. *Special Topics in Organic Chemistry* Three Credit Hours
Required of B.S. Chemistry majors; elective to others.
A study of certain topics not covered in the introductory courses including the Claisen Condensation, carbohydrates, amino acids, proteins, liquids, nucleic acids, heterocyclic compounds, dyes, polynuclear compounds, terpenes, and steroids.
Lecture: three hours a week.
Prerequisites: Chemistry 303, 304.

404. *Advanced Topics in Organic Chemistry* Three Credit Hours
Required of B.S. Chemistry majors; elective to others.
A study of the mechanisms of organic reactions with emphasis on the critical interpretation of experimental data, structure determination by spectrophotometric methods, and special topics of current interest in Organic Chemistry.
Lecture: three hours a week.
Prerequisites: Chemistry 303, 304.

407. *Organic Preparations* Three Credit Hours
Required of all seniors majoring in B.S. Chemistry; elective to others.
Advanced organic syntheses and technique with emphasis on purity and yield of products.
Laboratory: six hours a week.
Prerequisites: Chemistry 303, 304.

408. *Qualitative Organic Analysis* Four Credit Hours
Required of all seniors majoring in B.S. Chemistry; elective to others.
The classification, the study of type reactions, and the identification of pure organic compounds and mixtures of organic compounds.
Lecture: one hour a week; laboratory: six hours a week.
Prerequisites: Chemistry 304 and 308.

411. *Physical Chemistry Topics* Three Credit Hours
Required of all seniors majoring in B.S. Chemistry.
Further exploration of problems and theory of physical chemistry in areas not fully treated in Physical Chemistry 305, 306.
Lectures: three hours a week.
Prerequisites: Chemistry 304 and 306.

412. *Inorganic Preparations* Two Credit Hours
Required of all seniors majoring in B.S. Chemistry.
Techniques employed in several widely different inorganic syntheses.
Prerequisites: Chemistry 302, 305.
Lecture: one hour a week; laboratory: two hours a week.

Geology

The geology division operates within the administration of the Chemistry department to offer as electives to upperclassmen two lecture

and two laboratory courses in elementary geology. In the fall semester, students may elect either geology 201 alone for three hours credit, or geology 201 and 211 concurrently for four hours credit. In the spring semester students may elect either geology 202 alone or geology 202 and 212 concurrently. These options have been provided to permit students with crowded schedules to elect three hours of geology where a four-hour course could not be scheduled. The geology faculty offers a somewhat modified elementary geology course, 303, for juniors in civil engineering.

Geological investigations and the subject matter of geology cover many fields directly related to the understanding of the physical earth and universe, the biological earth, and the economics of societies. Facilities are available within the chemistry department at The Citadel for student research in geochemistry at the senior level.

201. *Physical Geology* Three Credit Hours
Elective to upperclassmen.

Origin of the solar system and universe; geologic time; minerals and ores; rocks and rock-forming processes; structural geology; processes which shape the surface of the earth; elementary physical oceanography. Lecture: three hours.

211. *Geology Laboratory* One Credit Hour

Identification of minerals and rocks; interpretation of rock structure by use of geologic and topographic maps.
Laboratory: two hours.
Corerequisite: Geology 201.

202. *Physical and Historical Geology* Three Credit Hours
Elective to upperclassmen.

Interior of the earth and internal prosesses which deform the crust of the earth; earthquakes; ancient life and the practical use of fossils in geology; geologic history of North America; continental drift and other controversial topics. Lecture: three hours.
Prerequisite: Geology 201 or permission of the instructor.

212. *Geology Laboratory* One Credit Hour

Interpretation of the geological significance of surface features on topographic maps; identification of fossils. Laboratory: two hours.
Prerequisite: Geology 201 and 211. Corequisite: Geology 202.

303. *Geology for Engineers* Three Credit Hours
Required of and limited to juniors in civil engineering.

Minerals and rocks; structural geology; surface and ground water; other processes which shape the surface of the earth and their influence on engineering practice; earthquakes; geophysical exploration; geologic maps. Lecture: two hours a week. Laboratory: two hours a week.

304. *Marine Geology* Three Credit Hours
Elective to upperclassmen; offered in alternate years beginning Spring 1971.

Techniques of physical oceanography; shapes and evolution of ocean basins and floors; variations in properties of sea water; waves; tides; currents; beach erosion; estuaries; sedimentation; changes in sea level.

Lecture: three hours a week.

Prerequisites: Geology 201 or 303, or permission of the department head.

306. *Geochemistry* Three Credit Hours

Elective to upperclassmen; offered in alternate years beginning Spring 1972.

Composition and chemical evolution of the earth and its relationship to the solar system and universe; processes and materials of the outer portion (crust) of the earth, the oceans and the atmosphere.

Lecture: three hours a week.

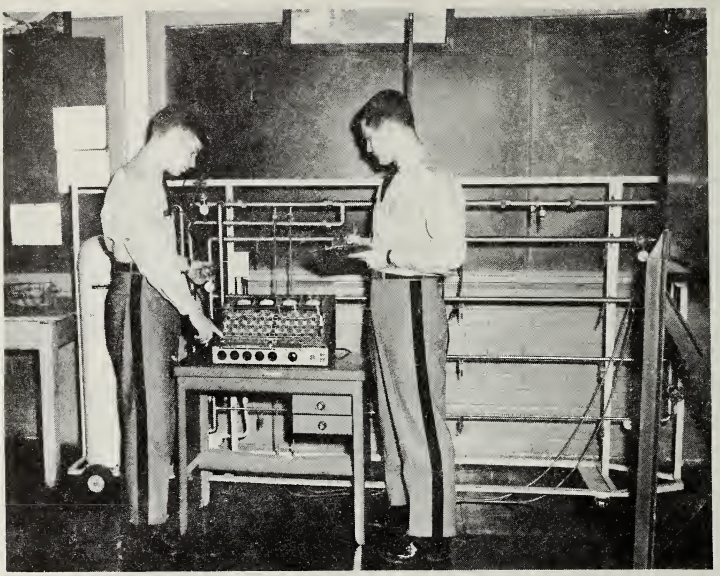
Prerequisites: Geology 201 or 303, or permission of department head.

420. *Senior Research Project* Three Credit Hours

Required of all B.S. Chemistry majors; elective to others with permission of department head.

A laboratory research project and accompanying report on an approved topic of the student's choosing. All work will be supervised by two members of the Chemistry Department faculty.

These Cadets wear Gold Stars for making virtually straight A's.



Fluid Circuit Apparatus and Associated Analog Simulator

Department

of

Civil Engineering

Professors: Himelright, Myers, Mellard
Associate Professors: Hutto
Assistant Professors: Middleton, Rutland, Clock, VonKolnitz, Smith

The objective of the Civil Engineering Department is to give a course that will meet the basic educational requirements of the profession of civil engineering. This objective is sought through a co-ordinated program of liberal, scientific, and technological courses designed to broaden and enrich the student's general education as well as to lay the foundation for technical competence.

Included in the curriculum is a number of liberal arts courses so that students may achieve a well-rounded general education. Courses in the basic sciences have been broadened.

The program in the freshman class does not differ essentially from liberal arts programs in most undergraduate courses. In the sophomore class, limited specialization begins with the introduction of courses in surveying and mechanics. In the junior and senior years the time is devoted essentially to basic professional courses. Throughout the four years the program is taught with the primary emphasis upon inculcating habits of orderly study, investigation, and sound reasoning rather than upon the mere acquisition of factual information. Constant attention, too, is given to engineering procedure in its wider sense, that is, the characteristic methods by which engineers conceive, design, and construct engineering projects.

Seminars in various engineering specialties are held several times a year at which time educators and practicing engineers from other areas are invited to present lectures and moderate discussions. These give the students the opportunity to gain new concepts from others than the department staff.

Such a curriculum, ably taught, should prepare the better students to develop a mastery of such special fields as their subsequent employment may lead to or to pursue more advanced work in the graduate schools of engineering. In general educational value, if properly adapted to the student's interests and aptitudes, it should meet the educational demands of good citizenship in whatever field the graduate enters.

The concept of the engineer is that of a professional man thoroughly grounded in engineering science and technology but also alive to the social and economic implications of his professional activities. It clearly appears to be the duty of engineering schools to fashion their graduates in this mold in so far as limitations of time will permit.

The civil engineering curriculum is accredited by the Engineers' Council for Professional Development.

There is a successful student chapter of the American Society of Civil Engineers.

For students having an especial interest in highway engineering there is a student chapter of The American Road Builders Association.

There is an active chapter of Sigma Epsilon Pi, a local honorary engineering society.

DEGREE: The degree of Bachelor of Science in Civil Engineering (B.S. in C.E.) is awarded to those who successfully complete the program of studies on pages 108 and 109.

BUILDINGS: The department is housed in its own buildings on the north end of the campus. The main building was designed specifically for the needs of civil engineering instruction, and it contains the necessary laboratories, drafting rooms, classrooms, and other rooms needed to carry on the work of the department. An auxiliary building houses a portion of the soils laboratory. In addition this department has classrooms and a drafting room in the Physical Education Building.

JOHN ANDERSON MEMORIAL LIBRARY: The department maintains a small but well-selected and arranged library that is open to students at all hours. Current copies and files of leading engineering magazines are available in the reading room. A Geodex reference locating system in the library affords a quick and easy method of locating articles and research papers on structural members, materials, processes and theories.

EQUIPMENT: Well-equipped laboratories are maintained for work in cement and concrete, bituminous materials, soils, fluid mechanics, sanitary engineering and structural materials. For the work in cement and concrete a curing room with temperature and humidity controls and another room for steam curing are available.

In the concrete laboratory the equipment includes a large supply of molds, platform scales, mixing tables, two two-cubic-foot concrete mixers, concrete block machine, air entrainment measuring apparatus, and the usual minor articles.

In the materials testing laboratory the main items of equipment are a 400,000 pound Baldwin-Southwark universal hydraulic testing machine with a clearance of ten feet for column testing and a 36-inch wide working table; a 60,000 pound Tinius-Olsen hydraulic universal testing machine with automatic stress-strain recorder; a 150,000 pound Olsen screw-power universal testing machine; a 10,000 inch pound torsion machine; a Rockwell hardness testing machine; a Sonntag fatigue machine; Brinell, cold bend, shearing, and transverse testing attachments, three spherically seated bearing blocks, and a variety of specimen grips for tensile testing; SR-4, Berry Whittemore, Riehle, and G. F. Moore strain gauges; compressometers, deflectometers, and other instruments for measuring deformation; a Beggs deformeter for use in model analysis; machined bearing blocks and I-beam with adjustable supports for transverse tests. This laboratory is equipped with an overhead crane for handling heavy specimens in any part of the room.

A sonometer with oscilograph has been added to be used for various tests and research projects where such equipment can be used to advantage.

In the bituminous materials testing laboratory there is adequate equipment for making routine tests of asphalt cements, cut-back asphalts, and emulsified asphalts as well as tests of road tars. The equipment includes a Saybolt-Furol viscosimeter, an Engler viscosimeter, apparatus for kinematic viscosity, distillation apparatus, penetrometer, a Cleveland open-cup flash point apparatus, ring and ball softening point apparatus, a Rotorex extraction machine and float test apparatus. In addition there is a Marshall Stability Testing machine and accessory equipment for design and analyzing asphalt paving mixtures by the Marshall method. Also there is complete equipment of 2" and 6" Hubbard-Field apparatus for molding specimens for design of bituminous mixtures. Supplemental equipment includes ample glassware, thermostatically controlled electric and gas ovens, constant temperature water bath, a cold water circulating apparatus and cleaning tank with special solvent for quick and easy cleaning of equipment.

The soils laboratories are equipped with both scale and dead-weight consolidometers, triaxial and direct shear machines, unconfined compression machines, permeameters, Atterberg limit equipment, Proctor and modified A.A.S.H.O. compaction apparatus, standard sieves and soil hydrometers, C.B.R. apparatus, and other equipment needed for tests and experiments with soils.

The Fluid Mechanics Laboratory is equipped for a variety of experiments in the flow of water through pipes, through meters, through orifices, through a Parshall flume and over weirs. For these experiments water is supplied by a 500-gpm centrifugal pump to a constant head tank from which it is distributed to the various test units and returned through floor channels to intake. In connection with this distribution apparatus differential gages, piezometric tubes, straight and hook gages, weighing tanks and scales are used. A fluid circuit apparatus designed for experiments involving loss of head in pipes and at fittings, and measurement of flow by means of self-contained Venturi and orifice meters is accompanied by an analog simulator which permits electronic representation of the various fluid circuits. A smoke tunnel is available for use in simulation of both hydrodynamic and aerodynamic phenomena. A device for determination of critical values of the Reynolds Number for flow of water is provided; and recently a hydraulic demonstration unit has been added which permits quantitative experiments involving a large number of phenomena of both pipe and open channel flow.

The sanitary engineering laboratory is equipped primarily for the accomplishment of determinations according to "Standard Methods" which constitute the current practice for ordinary problems in water and waste water treatment. For water analysis, pH, alkalinity, hardness, turbidity and color, determinations may be made as well as determinations of various specific chemical radicals and bacteriological examinations. For waste water analysis, biochemical oxygen demand and solids content may be determined. The equipment includes incu-

bators, muffle furnace, balances, drying oven, pH meters, distilled water still, demineralizer, simple electrophotometric devices, a constant temperature refrigerator, a vacuum pump, and an autoclave. Recently a clean room sampling kit for determination of particulate contamination has been added.

Adequate equipment is available for the courses in surveying. This includes fourteen transits, one micro-optical reading transit, nine levels, four plane tables, two sextants, aneroid barometer, several compasses, standardized tapes, and a complete supply of level rods, tapes, and pins. For photogrammetric work there is a rectoplanograph, stereocomparagraph, stereoscope radial plotter, extended eye base stereoscope, parallax bar, "Lazy Daisy" mechanical triangulation set, forty pocket stereoscopes, thirty-nine height finders and about five hundred aerial photographs of various sections of the United States including a complete stereoscopic coverage of Charleston County, South Carolina. This equipment is used in both the surveying and the photogrammetry courses.

All drafting rooms, laboratories, classrooms, and the library are equipped with fluorescent lighting. Two of the larger classrooms and one drafting room may be darkened at any time to show motion pictures, for which a sound or slide projector is available. The drawing rooms are furnished with tables, and there are available drafting machines, parallel rules, planimeters and necessary minor items. A printing room is equipped with an Ozalid dry printing machine.

A computation room in the center of the building, open to students at all times, is equipped with Monroe calculating machines. This facility has done much to expedite numerical calculations and thus saves much of the students' time. Also in this room is an IBM card punch machine for use by the staff and students. An IBM 1130 computer center is maintained elsewhere on the campus.

An assembly room equipped with black-out shades, a large projection screen, and raised speaker's platform, and having a seating capacity of one-hundred-forty persons, provides a meeting room for student societies, instruction with visual aids, and other meetings.

The non-technical electives must be in the field of humanities. The technical elective and the non-technical electives must have the approval of the Department of Civil Engineering. Also the requirements of the department offering the elective must be met.

101, 102. *Graphic Science* Four Credit Hours
Required of all Civil Engineering Freshmen.

Use and care of drawing instruments; proper weights and types of lines for clear, clean-cut, and complete graphical representation; useful geometrical construction; freehand sketching; orthographic projection; auxiliary, revolved, and sectional views; pictorial representation with emphasis on isometric drawing; dimensioning; true lengths and shapes; intersections and developments; problems on points, lines, and planes to be solved by the method of auxiliary planes in third angle pro-

jection; also specifications of fastenings, and typical engineering drawing of a steel truss. Problems selected with a view to emphasizing practical applications and developing the ability of the student to think in three dimensions. Development of reasonable skill in lettering.

Laboratory: four hours.

202. *Statics* Three Credit Hours

Required of all Civil Engineering Sophomores.

Scalar and Vector solutions of problems in statics: principles of statics; resultants, reactions, and equilibrium of forces; analysis of simple trusses; friction; centroids and centers of gravity; moments of inertia.

Lecture: two hours; laboratory: two hours.

Prerequisites: Phy. 110; Graphic Science 102; or concurrent with Graphic Science 102.

204. *Photogrammetry* One Credit Hour

Required of all Civil Engineering Sophomores.

An elementary course in aerial photography and topographic mapping; methods of topographic projection; planning topographic flights; basic photo-interpretation; geometric properties of photographs; radial line plotting; photographic measurements. Laboratory: two hours.

Prerequisites: C.E. 206 or concurrent with C.E. 206.

205, 206. *Surveying* Four Credit Hours Each Semester

Required of all Civil Engineering Sophomores.

Linear measurements; leveling; compass and transit; slide rule and calculating machines; theory of errors; land surveying and boundary laws; latitudes and departures; areas and volumes; stadia; plane table; route surveys; vertical, circular, and transition curves; State plane coordinates; standard map projections; Polaris and solar observations; introduction to the use of electronic computers and the solution of problems related to surveying and other fields of civil engineering. During the 206 semester there is a one-day, eight-hour field trip on a designated Saturday for the purpose of making a complete topographic survey from which a topographic map is drawn. Also required is one night-time Polaris observation during the 206 semester. Required student equipment: "log-log" duplex slide rule.

Lecture: three hours. Field two hours in addition to the field trip and Polaris observation.

Prerequisites: For C.E. 205; Graphic Science 101; For C.E. 206; C.E. 205; Math. 131.

301. *Dynamics* Three Credit Hours

Required of all Civil Engineering Juniors.

Types and principles of motion in relation to rigid bodies; rectilinear translation; curvilinear translation; rotation; work and energy; impulse and momentum. Lecture: three hours.

Prerequisites: C.E. 202; Math. 132.

303. *Mechanics of Materials* Four Credit Hours
Required of all Civil Engineering Juniors.

Elastic properties of structural materials; internal stresses and strains; torsion; flexure; shear; riveted and welded joints; shear and moment diagrams; combined stresses; beam deflections; unsymmetrical bending; principal stress; columns: Supplemented by C.E. 307, taken concurrently or subsequently to C.E. 303. Lecture: three hours; laboratory: two hours.

Prerequisites: C.E. 202; Math. 132.

305. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.

Highway economics; road costs and road user costs; economic comparison of alternates by benefit-cost ratio method; planning and financing; legislation and administration; location and geometric design; basic principles of traffic surveys; method of predicting future traffic volumes; basic highway soils engineering; drainage, grading. Lecture: three hours.

Prerequisite: C.E. 206.

306. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.

Alignment and earthwork drawings and computations; routine tests of highway materials, bituminous and non-bituminous; pavement and base thickness design; design and testing of asphalt paving mixtures; construction of roadway elements; construction surveys; contracts and specifications. Lecture: two hours; laboratory: two hours.

Prerequisite: C.E. 305.

307. *Materials Laboratory* One Credit Hour
Required of all Civil Engineering Juniors.

Laboratory supplement to Mechanics of Materials, C.E. 303. Introduction to the use of testing machines and equipment; strength and deformation measurements of ferous metals and concrete; properties of materials as determined by test results; compression; tensile and bending specimen tests; use of SR-4 electric strain gauge; the determination of stresses and strains in models of structural frames; use of ASTM Specifications and Test Procedure. Laboratory: three hours.

Prerequisites: Math. 132; C.E. 202; C.E. 303 or concurrent with C.E. 303.

308. *Structural Analysis I* Three Credit Hours
Required of all Civil Engineering Juniors.

Analysis of simple structures: force systems in space; shear and moment for static and moving loads on beams; stresses in members of truss structures; influence line diagrams; plastic theory and analysis of steel beams.

Lecture: three hours.

Prerequisites: C.E. 303; Math. 231.

312. *Computer Application for Civil Engineering* One Credit Hour
Required of all Civil Engineering Juniors.

The solution of Civil Engineering problems using Electronic Computer programs and problems oriented languages. Lecture: one hour, Prerequisite: C.E. 206.

314. *Engineering Administration* Two Credit Hours
Required of all Civil Engineering Juniors.

An elementary course in engineering administration with primary attention given to the basic principles of engineering economy as applied to determination of the relative economic costs of the construction and operation of various civil engineering works. In addition, the course covers engineering ethics as applied by practicing engineers and introduces concepts of construction management and elements of contract law.

Lecture: Two hours.

Prerequisite: Completion of all Freshman work.

401. *Concrete Laboratory* One Credit Hour
Required of all Civil Engineering Seniors.

Design, preparation and testing of portland cement concrete mixes for a desired quality of concrete using both plain portland cement concrete and concretes containing the various commonly used admixtures; test specimens cured under controlled temperatures and moisture conditions; close attention given to the influence of the quality and grading of the aggregates and to other features affecting the properties of the concrete ultimately forming a structure; study and discussion of specifications governing good construction practice in handling and placing aggregates and concrete, and the control and inspection of same.

Laboratory: two hours.

Prerequisites: C.E. 307, Math. 232, C.E. 312.

402. *Soil Mechanics Laboratory* One Credit Hour
Required of all Civil Engineering Seniors.

Classification, control, and soil strength tests to predict suitability of soil for use in earth dams, roads, and foundations; to include specific gravity, combined mechanical analysis, Atterberg limits, permeability, compaction, unconfined compression, consolidation, triaxial, direct shear, and C.B.R. tests; field tests to consist of field density tests, soil borings, and load tests. Laboratory: two hours.

Prerequisites: C.E. 401; C.E. 410 to be taken concurrently.

403, 404. *Reinforced Concrete Design* Three Credit Hours Each Semester
Required of all Civil Engineering Seniors.

Theory and design of reinforced concrete structures, including the ultimate theory as applied to beams and columns. Design of footings; retaining walls; combined stress members; basic theory of prestressed

concrete design; design of selected portions of concrete structures with special attention to current specifications for design and construction. Lecture: three hours.

Prerequisites: For C.E. 403; C.E. 303; C.E. 308; C.E. 312; Math. 232. For C.E. 404, C.E. 403.

405. *Structural Analysis II* Three Credit Hours

Required of all Civil Engineering Seniors.

Theory of statically indeterminate structures, using method of work, three moment theorem, slope deflection, moment distribution; analysis of multistoried steel frame building; model analysis using Beggs Deformeter. Lecture: two hours; laboratory: two hours.

Prerequisites: C.E. 303, C.E. 308, C.E. 312, Math. 232.

406. *Steel Design* Three Credit Hours

Required of all Civil Engineering Seniors.

Two different philosophies and analysis and design: First, by the elestic theory, the design of tension and compression members, beams, plate girders; analysis and design of highway bridge trusses; analysis, design, and structural drawing of a steel mill building. Second, by the plastic theory, the analysis and design of continuous beams and single-story rigid frames. Lecture: two hours; laboratory: two hours.

Prerequisite: C.E. 405.

407. *Fluid Mechanics* Four Credit Hours

Required of all Civil Engineering Seniors.

Fluid characteristics, properties and definitions; fluid statics; fluid dynamics; fluid flow and measurements, and application in meters, orifices, weirs, pipes, and open channels; laboratory period for experimental demonstration of theory and for supervised computation work. Lecture: three hours; laboratory: two hours.

Prerequisite: C.E. 301, C.E. 312, Math. 232.

408. *Sanitary Engineering* Four Credit Hours

Required of Civil Engineering Seniors.

Relationship of water supply and sewage disposal to public health; hydrology; water consumption; quality standards; collection, treatment and distribution of water; sewers and sewage; quantity and characteristics of sewage; methods of treatment and disposal of sewage; laboratory period for experimental demonstration of theory and for supervised computation work. Lecture: three hours; laboratory: two hours.

Prerequisite: C.E. 407.

409, 410. *Soil Mechanics and Foundations* Three Credit Hours Each Semester

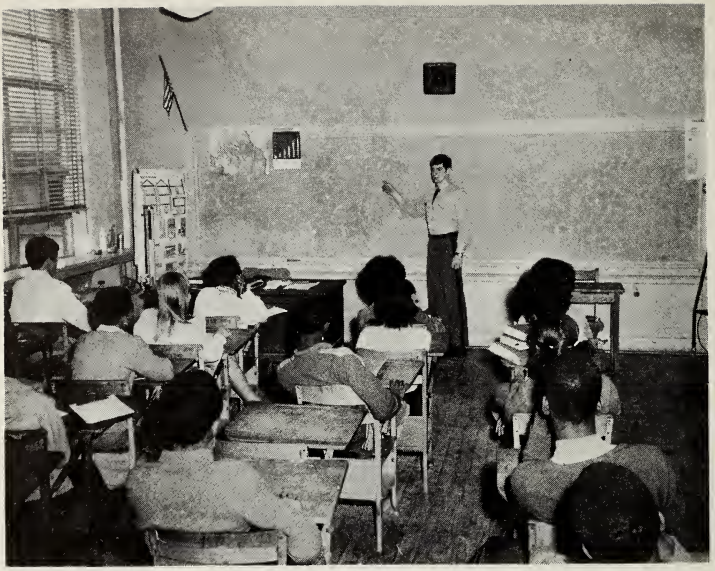
Required of all Civil Engineering Seniors.

Soil physics; nomenclature and field identification; grain shape and soil structure; classification systems; soil capillarity; Atterberg limits;

permeability; seepage; flow nets; piping; subsurface drainage; frost action; permafrost; stresses in soils; consolidation; shear strength; stability of slopes; earth dams; bearing capacity; shallow foundations; pile foundations; earth pressure; retaining walls and open cuts; underpinning; caissons and cofferdams; subsurface exploration; soil stabilization. Lecture: three hours.

Prerequisites: Geol. 303, C.E. 312, C.E. 306, Math. 232, C.E. 402 to be taken concurrently with C.E. 410. C.E. 407 to be taken concurrently with or preceding C.E. 409.

420. *Senior Research Project* Two Credit Hours
Required of all Civil Engineering Seniors as a prerequisite to graduation.



From Theory to Practice Teaching in a Local High School

Department

of

Education

Professors: Hirshey, Bowman.
Associate Professors: Magoulas, Hillard.
Assistant Professors: Lenhardt, Berryhill, Weston, Hudson, Rhett, Robinson, Jay, Sizemore.

I. THE DEPARTMENT

The Department of Education is the administrative unit at The Citadel in which resides the responsibility for providing curricula in professional education and certain humanistic and behavioral studies. This complex departmental structure encompasses, in addition to professional studies in secondary education, library science and limited elementary education, the following disciplines: psychology, philosophy, sociology and the fine arts.

II. PURPOSE

The above description of the Department of Education evidences a duality of basic purpose as being the preparation of personnel for teaching and specialized fields of work in education and providing significant elective courses for all students which contribute to the liberal education of modern man. Another purpose of the department is the provision of leadership and assistance in the upgrading of educational programs of public and private schools. Through assumption of varied responsibilities for the region, the Department of Education exerts important influence in the improvement of education at all levels.

The deducible objectives which emerge from the cited purposes of the programs offered in the Department of Education include the following though the enumeration is not necessarily delimited to this list:

1. To develop understandings and appreciation of democracy and the function of the public school in our democratic society.
2. To develop respect and compassion for the rights, responsibilities and welfare of others.
3. To emphasize the moral, spiritual and aesthetic values which will enhance the potential of the individual in his personal and professional life.
4. To educate for an understanding of human beings in relation to their individual differences, the nature of the learning process, development behavior and the interaction of the individual with the group and total environment.
5. To upgrade the student's basic skills and to promote utilization of reflective thinking in problem solving.
6. To develop scholarship and mastery of a body of knowledge in the selected teaching specialty or major field of emphasis.
7. To develop understandings and competencies in teaching organization and methodology.
8. To counsel and encourage qualified students to enter the profession of education.

9. To develop interest and skills in worthwhile recreational and leisure type activities suitable throughout life.
10. To utilize the departmental resources, human and physical, for the improvement of education, both public and private.

PROGRAM FOR SECONDARY EDUCATION MAJORS

Admission to The Department of Education as a major may be granted upon registration as a Freshman or by transfer from another department no later than the start of the sixth semester of attendance at The Citadel. Students wishing to major in secondary education shall meet certain standards as established by the department which are in consonance with national accreditation expectations. Education majors will be screened via factors including physical and mental health, personal fitness, communication skills, potential for and academic achievement, and results on such standardized tests as may be utilized. Judgments of teachers, professors and administrative personnel provide invaluable evidence.

The secondary education curriculum as listed on page 110 is a format for students planning their programs of study. The first four semesters include a block of courses which provides for general education or common learnings normally deemed invaluable to every college student. The last four semesters stress professional education and the teaching specialty or academic major. Provision is made for electives during the final two years. Education majors will fill their electives with study in psychology, sociology, philosophy, foreign language or education. Following is a summary of the three areas in which courses will be studied as prescribed and which serve as a framework within which each student will develop a program of study consistent with his individual needs as a future teacher:

EDUCATION CURRICULUM

AREA A: COMMON LEARNINGS - First Four Semesters

ENGLISH: 101, 102, 201, 202, 205	15 semester hours
MATHEMATICS: 101, 102	6 semester hours
SCIENCES: Biol. 101, 102, Chem. or Physics	16 semester hours
HISTORY: 101, 102, 201, 202	12 semester hours
FINE ARTS: Music 205, Art 206	6 semester hours
PSYCHOLOGY: 201, 305	6 semester hours
HEALTH: Physical Education 301	3 semester hours
PHYSICAL EDUCATION: RPE 4 semesters	0 semester hours
TOTAL SEMESTER HOURS:	64
ROTC: 101, 102, 201, 202	8 semester hours

AREA B: PROFESSIONAL EDUCATION - Last Four Semesters

EDUCATION: 301, 302, 305, 400, 401, 403, and one elective course	24 semester hours

AREA C: MAJOR TEACHING FIELD - Last Five Semesters

Students shall elect one of the following subject areas as their major teaching field prior to the beginning of the fifth semester for which minimum credit requirements are indicated. Advisors may require more than the minimal hours when students are found lacking in preparation for teaching the major subject. Forty per cent of the courses shall be selected from the 300 and 400 series in the teaching field major and a point average of 2.0 must be achieved in order to meet graduation requirements and state certification.

ENGLISH - 30 semester hours beginning with English 101
MATHEMATICS - 30 semester hours
FOREIGN LANGUAGE - 30 semester hours in one language
GOVERNMENT - 30 semester hours including 6 in Economics
HISTORY - 33 semester hours including 6 in Economics
NATURAL SCIENCE - 36 semester hours with 24 hours in one field
SOCIAL STUDIES - 45 semester hours with 6 in Economics and the balance in four other social studies subjects including history.

Description of Courses

301. *Philosophy of Education* Three Credit Hours

An orientation course; a survey of the history, philosophies, and theories underlying organized education; the significance of the dissemination of knowledge in a democracy.

302. *Educational Psychology* Three Credit Hours

This course seeks to bring the principles of educational psychology to prospective teachers in order that they may teach more effectively. A vast body of educational research and practice is brought to bear on the following area: psychology and school problems; learning readiness and its development; learning skills, ideas, and attitudes; planning, motivation, and evaluation of learning; and emotional and mental health for learning.

303. *Guidance* Three Credit Hours

Philosophy, principles, and techniques to provide teachers with competencies needed for participation in guidance programs; theories and practices of guidance; mental, vocational, and aptitude testing.

305. *Child and Adolescent Development* Three Credit Hours

Acquisition of understanding and appreciation of the mental, physical, social and emotional aspects of development in childhood and adolescence. Emphasis on techniques of motivation, principles of learning, the role of individual differences, the improvement of study habits and environmental factors affecting personalities, growth and intellectual interests.

Ed. 310. *Teaching Reading in Elementary School* Three Credit Hours

A course designed to teach modern reading concepts and teaching strategies to elementary teachers. Basic methods, trends, recent materials, and crucial issues in reading programs are emphasized.

Ed. 311. *Teaching Modern Mathematics in Elementary School* — Three Credit Hours

A course designed for elementary school teaching methods in modern mathematics. Teaching the number system and arithmetical operations meaningfully is emphasized.

400. *Directed Teaching* — Six Credit Hours

A requirement for certification; observation and teaching in approved high schools under approved supervising teachers; supervision by college instructor.

The student must reserve for this teaching internship the same three consecutive hours daily, Monday through Friday, and must be enrolled concurrently in Practicum Education 403. He provides his own transportation. He must make formal application for Directed Teaching not later than six weeks prior to the beginning of the semester. Prerequisite: Education 301, 305, 401.

401. *Methods and Materials of Secondary School Teaching* — Three Credit Hours

Study of the aims, methods and materials employed in secondary school teaching; organization of subject-matter; motivation and direction of learning; development of attitudes, appreciations and ideals; classroom presentation of formal materials; conducting informal activities; provision for individual differences; measuring educational outcomes; reports; discussion.

402. *Principles and Problems of Secondary Education* — Three Credit Hours

Definition and analysis of issues in American secondary education; the principles most applicable to the solution of these problems; the aims, curriculum, scope, and organization of th esecondary school. Secondary education is a changing America; the impact of world conditions upon the secondary school; American secondary schools and the future.

403. *Practicum* — Three Credit Hours

Special attention to the practical application of techniques of teaching and classroom management, comparison of techniques in specialized areas, typical problems encountered in student teaching and general principles of school laws applicable to the classroom teacher. Practical interpretations of professional ethics and the functions of professional organizations. Limited to students in Directed Teaching.

406. *Educational Tests and Measurements* — Three Credit Hours

Theories, principles, and practices of mental and educational measurements. The construction and use of the various types of objective instruments of evaluation. Elements of statistics needed in the interpretation and use of examination results.

407. *Audio-Visual Aids* — Three Credit Hours

The aims and scope of audio-visual instruction; techniques underly-

ing their use; projects and practice in the uses of objects, specimens, models and pictures; the opaque projector, the motion picture, film strips, and slides; radio, television, the public address system, and the various types of recorders; selection and care of equipment; administration and supervision of the audio-visual program.

RELATED FIELDS

In addition to the electives listed below, any of the Education courses may be elected by qualified students in other departments.

Psychology

201. *General Psychology* Three Credit Hours

An introduction to the scientific study of behavior; emphasis upon experimental investigation of such fields as attention, perception, learning, intelligence, emotion, and personality.

Elective for sophomores, juniors, and seniors.

304. *Abnormal Psychology* Three Credit Hours

Findings based upon experimental investigation of such fields as attention, perception, and association; theories of personality; discussion of the common neuroses and psychoses.

Prerequisite: Psychology 201.

305. *Social Psychology* Three Credit Hours

A study of the individual in relation to his social environment with special attention to group behavior, social motivation, and individual adjustment to group situations. May be considered a social science course.

306. *Theories of Personality* Three Credit Hours

A study of major contemporary theories of personality with special emphasis on the biological and psychological foundations and integrative aspects of personality.

307. *Mental Hygiene* Three Credit Hours

Science of preserving psychological health. The causes and prevention of mental abnormalities.

310. *Human Growth and Development*

Survey of total human development—mental, emotional, physical, and social—prenatal to senescent stages. Patterns of normal and deviate behavior.

401. *Psychology of Adolescence* Three Credit Hours

The physical, psychological, and social development of the adolescent; emphasis on personality formation and problems of social adjustment.

404. *Applied Psychology* Three Credit Hours

Application of the principles of psychology to such topics as education, mental health, industry, crime, advertising, and personal problems. Emphasis will be upon a practical system of psychology and the well-integrated personality.

Philosophy

201. *Introduction to Philosophy* Three Credit Hours
An introduction of the fundamental problems of the nature of knowledge (epistemology), of the good (ethics), of beauty (aesthetics), and of being (metaphysics), together with a survey of ancient Greek culture emphasizing the pre-Socratic philosophers.

306. *Logic* Three Credit Hours
The history and principles of valid thinking; laws of reasoning; common fallacies; deductive and inductive methods. No prerequisite.

307. *Ancient Philosophy* Three Credit Hours
The history of Western thought from Thales to St. Augustine. The development of intellectual insights in the European tradition based upon readings in the works of classical thinkers.
Prerequisite: at least Junior standing.

308. *Medieval and Early Modern Philosophy* Three Credit Hours
A study of the ideas most important to the contemporary world which were developed in the Medieval period. Emphasis upon St. Thomas and Meister Eckhart.
Prerequisite: at least Junior standing.

309. *Modern Philosophy* Three Credit Hours
The history of Western thought from Boethius to the present. Selected readings and discussion of Medieval, Renaissance, and Modern philosophers; primarily a survey of modern philosophy.
Prerequisite: at least Junior standing.

401. *Philosophy of Religion (Classical)* Three Credit Hours
The meaning of religion as discussed by the classical philosophers; its relation to other fields of human value and social life; the problem of justifying religious belief.
Prerequisite: at least Junior standing and three semester hours of philosophy or permission of the department head.

403. *Ethics* Three Credit Hours
An examination of traditional and recent ethical theory; reading and discussion of works by representatives of several alternative positions.
Prerequisite: at least Junior standing.

Sociology

201. *Introduction to Sociology* Three Credit Hours
The scientific study of principles and comparisons in society and culture as these relate to population and communities, behavior systems, group collectivity and structure, social change, and institutions.

202. *Social Problems* Three Credit Hours
Analysis of deviant behavior and those factors affecting the disorganization of small groups, complex organizations, and societies.

303. *The Contemporary American Family* Three Credit Hours

A frank and comprehensive analysis of the problems confronting the modern American family, with case studies treating the various phases of conflict within the family.

304. *General Anthropology* Three Credit Hours

Man's biological and cultural origins as studied by physical anthropologists, archaeologists and linguists.

401. *Criminology* Three Credit Hours

A study of crime, its causes, conditions prevention, and treatment; a presentation of theories and hypotheses, supported by concrete facts, designed to assure the student that the theories proposed are based upon realities and exact observation.

Recommended only for students who have completed Sociology 201.

402. *Cultural Anthropology* Three Credit Hours

A comparative study of culture; habitat, technology, and economy; kinship and political organization; life cycles in primitive societies.

403. *Urban Sociology* Three Credit Hours

Historical, demographic, and ecological material are used to study urban society with respect to its institutions, differentation, integration, and decentralization.

Fine Arts

205. *Music Appreciation* Three Credit Hours

A non-technical course to enhance the student's understanding and enjoyment of music by a two-fold approach; first, to gain fundamental knowledge of style, content, and form of the more outstanding works of the great composers; and, second, to study the evolution of musical art up to the present time; particular emphasis placed upon the latter.

206. *Art Appreciation* Three Credit Hours

The theory of abstract principles and material techniques as applied in the evaluation of works of art. The employment of such theory in an introductory study of famous art works.

301. *Ancient, Medieval, and Renaissance Art* Three Credit Hours

A survey of art from the prehistoric period through Sumerian, Egyptian, Aegean, Greek, Roman, Byzantine, Romanesque, and Gothic art, culminating in the Renaissance.

302. *Modern Art*

A study of Art styles beginning with a review of the Renaissance and continuing through Mannerism, Baroque, and Rococo art, with emphasis on the nineteenth and twentieth century schools.

Library Science

Courses in Library Science are under the Education Department.

The courses are intended to provide training for students wishing to qualify as teacher-librarians under the South Carolina Department of Education or to gain necessary undergraduate courses needed for admission to graduate programs of Library Science. Eighteen hours of undergraduate credit are needed for certification or as prerequisites for graduate school. Fifteen are available in Library Science, ano three are available in Audio-Visual Aids 407. These courses are concurrently offered in the evening school and in the summer session if there is sufficient demand. Although offered primarily to give the teachers of the community a chance to meet accreditation standards, Library Science 303 is useful as a general elective for students interested in training for graduate or research work in any field of study.

301. *Libraries and Library Service* Three Credit Hours

Designed to introduce the student to the field of Library Science and its requirements, to determine his aptitude for Library Work, and to define the purpose and function of libraries in general. Emphasis is upon the training and responsibilities of the librarian in the educational process. This is the basic introductory library administration course which acquaints the student with those facets of library administration which all libraries have in common.

302. *Administration of the School Library* Three Credit Hours

The administration, organization, planning and equipment of school libraries and teaching materials with emphasis upon budgeting, ordering, maintenance of the book collection and circulation procedures within a school library.

303. *Reference Sources* Three Credit Hours

An introduction to the 115 basic reference sources most used in college, university, public, and school libraries. This will include dictionaries, encyclopedias, indexes, yearbooks, government documents which are studied and evaluated for their use in each type of library. Emphasis is on the theory and practical experience in reference work.

304. *Cataloging and Classification* Three Credit Hours

Basic principles of cataloging and classification combined with practical experience in processing the various types of books and materials. Problems peculiar to teacher-librarian will be emphasized.

305. *Children's Literature* Three Credit Hours

History of children's books: their selection and evaluation, including modern books emphasizing winners of the Coldecott and Newbury Awards. Includes wide reading of all classes of children's literature and details which make children's books worthwhile. The course will be supplemented by discussion, reports, and special projects.

Graduate Study

Graduate study in the Department of Education proceeds under the general regulations of the Graduate Council with certain additional

requirements imposed by the department and its faculty. Graduate students in education and all disciplines register with the Director of Graduate Studies.

The course organization at the graduate level consists of a series of introductory and advanced courses offered throughout the calendar year. Courses during the regular school year are scheduled during evening hours while the morning hours are utilized during the summer sessions. Under current policy, a student in graduate study must pursue either a major or minor in education to become eligible for the Master of Arts in Teaching Degree. It is the expectation that the graduate program will expand in its offerings of majors and degrees.

Please refer to the Graduate Bulletin for information and course listings. Contact the graduate office for further information about literature, schedules and curricula.

After Theory—Practice

Department

of

Electrical Engineering

Professor: Herring
Associate Professors: Cory, Johnson, Scoggin

In 1941 the Board of Visitors authorized the establishment of a Department of Electrical Engineering at The Citadel. The department was founded to meet the needs of many students who are attracted to the type of education which The Citadel offers, but who were formerly compelled to go elsewhere to obtain training in the field of their special interest.

The first graduating class of eight men received degrees in September 1948. Since then, the facilities and curriculum have been steadily improved. A chapter of Student Members of the Institute of Electrical and Electronics Engineers is active at The Citadel.

It is the purpose of the department to prepare men for professional work or for graduate study in the field of electrical engineering and to give them training in as many of the elements of a broad education as can be included in a program of professional study leading to the degree of Bachelor of Science in Electrical Engineering.

The classrooms and laboratories of the department are located in the east wing of Bond Hall. The electronics laboratory is equipped with modern instruments and an efficient breadboarding system for the study of vacuum-tube and solid-state circuits. The apparatus used in the electrical measurements laboratory permits precise measurement of electrical parameters, time and frequency. An instrument storeroom and shop adjoins the electrical measurements laboratory and the electronics laboratory.

Three analog computers, a small digital computer and a breadboard servmechanism system are available in the computer and control system laboratory. A twenty-amplifier analog computer along with such peripheral equipment as a low-frequency function generator, an X-Y plotter, a digital voltmeter and an oscilloscope camera is used extensively in simulation of physical systems.

The machines laboratory is equipped with a flexible power distribution system and representative machines of moderate size. A Westinghouse generalized machine is also available. The department shop has adequate facilities for instrument repair and for construction of special apparatus.

For a tabulation of the course requirements for electrical engineering majors, see "Courses of Study," pages 112, 113. With the approval of the department head, up to six credit hours of Professional Electives may be elected from courses numbered above 300 in the department of chemistry, civil engineering, mathematics, or physics.

101. *Engineering Orientation* One Credit Hour
Required of electrical engineering freshmen.

A course describing the responsibilities and problems facing pro-

fessional engineers. Guidance and counseling in effective study methods. Lecture: one hour.

103. *Engineering Graphics* Two Credit Hours
Required of Electrical Engineering Freshmen.

Communication of engineering information by graphical methods. Visualization of three dimensional forms; free-hand sketching; graphical representation of experimental data. Use of drafting aids to produce electrical drawings. Development of reasonable skills in lettering.

Laboratory: four hours.

201, 202. *Introduction to Electrical Engineering* Three Credit Hours Each Semester
Required of electrical engineering sophomores.

D. C. circuit theory; simple networks; introduction to electric and magnetic fields; circuit components and their ratings; A. C. circuit theory; basic measuring instruments. A "Take-Home Laboratory Kit" is used to verify basic laws and relations.

Lecture: three hours, two semesters.

Prerequisites: To be preceded or accompanied by Physics 110-211; Math. 132.

301, 302. *Electrical Laboratory* One Credit Hour Each Semester
Required of electrical engineering juniors.

A two semester sequence of laboratory work which is coordinated with the lecture courses in the Junior year.

Laboratory: two hours.

305. *Introduction to Electronics* Three Credit Hours
Required of electrical engineering juniors.

Electron ballistics and basic semiconductor physics; characteristics of vacuum and solid-state devices; analysis of active networks.

Lecture: three hours.

Prerequisites: Math. 232; Physics 212; E.E. 202.

308. *Elements of Electrical Engineering* Three Credit Hours
Required of civil engineering juniors.

Electric and magnetic circuits and fields; electrical machinery; measurements, instrumentation and control; basic electronics.

Lecture: two hours; laboratory or demonstration: two hours.

Prerequisites: Math. 231; Physics 211.

309. *Linear Circuit Analysis* Three Credit Hours
Required of Electrical Engineering Juniors.

Solution of network equations; network theorems; Fourier series; transient response and the complex frequency plane; Laplace transforms; balanced and unbalanced polyphase circuits.

Lecture: three hours.

Prerequisites: Math. 232; Physics 212; E.E. 202.

310. *Electromechanical Energy Conversion* Five Credit Hours
Required of electrical engineering juniors.
A study of the principles and characteristics of static and dynamic energy conversion devices.
Lecture: five hours.
Prerequisites: E.E. 309.

401. *Electronic Circuits* Three Credit Hours
Theory and design of electronic circuits; narrow-band, wideband, and D. C. amplifiers; oscillators, modulators, and detectors; pulse circuits.
Lecture: three hours.
Prerequisites: E.E. 305, 309.

402. *Electronic Systems* Three Credit Hours
A.M., F.M., and pulse communication systems; instrumentation.
Lecture: three hours.
Prerequisites: E.E. 401.

405. *Electrical Measurements* Three Credit Hours
Modern methods of measuring resistance, inductance, capacitance, current, electromotive force, frequency, and magnetic quantities.
Lecture: three hours.
Prerequisities: E.E. 309.

407. *Logical Design of Digital Computers* Three Credit Hours
Boolean algebra; synthesis of switching circuits; basic logic circuits; digital computer structure; instruction codes; input-output and memory devices.
Lecture: three hours.

408. *Electric Power Systems* Three Credit Hours
A study of electric power generation, transmission and distribution circuits. System economics. Study of load-flow, faults and system stability.
Lecture: three hours.

409. *Seminar* One Credit Hour
Required of electrical engineering seniors.
A study of current literature in electrical engineering and related fields. A library research paper is required as a part of the course work.

411, 412. *Electrical Laboratory* One Credit Hour Each Semester
Required of electrical engineering seniors.
A two semester sequence of laboratory work which is coordinated with the lecture courses in the senior year.
Laboratory: two hours.

413, 414. *Circuit Networks* — Three Credit Hours Each Semester

Analysis and synthesis of electrical circuit networks using matrix and transform techniques; filter design; transient response of linear circuits.

Lecture: three hours, two semesters.

Prerequisites: E.E. 309, Math. 232.

415, 416. *Automatic Control Systems* — Three Credit Hours Each Semester

Electrical, mechanical, and hydraulic control system components; feedback theory; analysis and design of automatic control systems.

Lecture: three hours, two semesters.

Prerequisites: E.E. 310, Math. 232.

417, 418. *Electromagnetic Theory* — Three Credit Hours Each Semester

Required of electrical engineering seniors.

Vector algebra; electrostatic and magnetostatic fields; Maxwell's equations; boundary conditions; wave propagation and radiation.

Lecture: three hours, two semesters.

Prerequisites: E.E. 309, Math 232.

419. *System Simulation* — Three Credit Hours

A study of simulation methods for physical systems using analog and digital computers.

Lecture: three hours.

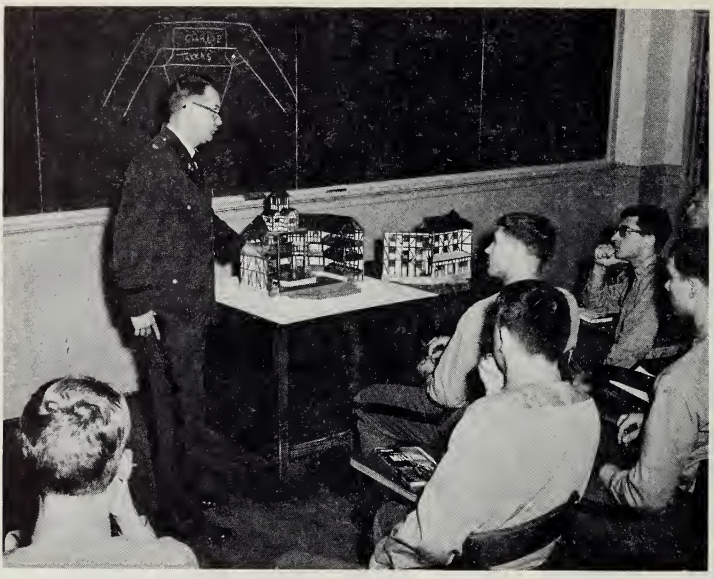
Prerequisite: Math 232.

420. *Senior Research Project* — Three Credit Hours

A research project and formal report. Recommended for students planning graduate work. Approval for enrollment based on capability of applicant and the acceptance of a written proposal.

Prerequisite: Approval of Department Head.

The Summerall Guards perform in Bermuda.



The Globe Theater of Shakespeare's Time

Department

of

English

Professors: Achurch, Doyle, McCoy, McDowell, H. C. Carpenter
Associate Professors: Alexander, Brennan, J. B. Carpenter, Holbein, Morris, Weile
Assistant Professors: Ashley, Harvey, Mathis, MacLeod, Nichols, O'Neil, Peurifoy, Redd, Rembert, Riley, Whitney

Courses in English composition and literature are required of all freshmen and sophomores, regardless of their major fields of study.

Advanced standing with credits is given entering cadets who complete the College Entrance Board Advanced Placement Test in English with a grade of three or better.

The course of study for the English major is designed to give the student a thorough grounding in the English language and in the literature of England and America and at the same time to give additional breadth to the student's development through prescribed courses in the natural sciences, mathematics, history, a modern foreign language, and selected courses from other departments related to the career or to the field of graduate study the student expects to follow after his graduation.

Since the student majoring in English has the opportunity of selecting at least five, and in some instances six, full-year courses in other specialized fields of study, many students select the English major as a liberal arts background for careers in business, journalism, and creative writing, or for graduate study of business, law, dentistry, theology, and similar fields.

For the first semester of his freshman year, the English major is required to elect one of the following courses: General Psychology 201, Introduction to Sociology 201, Government 201. For the second semester he is required to elect one of the following courses: Art Appreciation 206, General Semantics 210, Introduction to Public Speaking 205, American National Government 202, Astronomy 201. For his sophomore year he must elect one of the natural sciences: biology, chemistry, or physics.

The required courses in the department for the English major are English 203, 204 (The English Language), English 301 (Chaucer), English 400 (Milton), English 401, 402 (Shakespeare), English 403, 404 (American Literature). In addition, the student must elect six semester courses from the department other than English 205, 206, 409, and 410.

The foreign language requirement for the English major is French or German 101, 102, 201, 202. Entering freshmen with two or more units in either of these languages complete their modern language requirement in one year and hence acquire another elective course.

For a tabulation of the requirements for the English major, see "Courses of Study," pages 114, 115.

101, 102. *Composition and Literature* Three Credit Hours Each Semester

Required of all freshmen. The development of the basic skills of writing and reading and of literary evaluations through the study of five types of literature. English 101 is a prerequisite for English 102. Lecture: three hours.

201, 202. *Major British Writers* Three Credit Hours Each Semester

Required of all sophomores. A study in depth of major writers in British literature from the medieval period to the present. English 201: Chaucer, Shakespeare, Milton, Pope, and Swift. English 202: Wordsworth, Keats, Tennyson, Browning, Hardy, Yeats, and Eliot. Several themes on the literature studied. Lecture: three hours. Prerequisite: English 101, 102.

203, 204. *The English Language* Three Credit Hours Each Semester

Required of sophomores majoring in English. Open as an elective to others.

A survey of the history of the English language, beginning with the Indo-European backgrounds, tracing the development of Old, Middle, and Modern English through major phonological, morphological, and syntactical changes, with some attention to dialectal variations, and concluding with emphasis on standard and current grammar and usage. Lecture: three hours.

205. *Introduction to Public Speaking* Three Credit Hours

Open to freshmen, sophomores, juniors, and seniors.

The general principles of speech composition and speech presentation; practice in expository speaking. Lecture: three hours.
Prerequisite: English 101.

206. *Persuasive Speaking* Three Credit Hours

Open to sophomores, juniors, and seniors.

Logic, rhetoric, and psychology of securing desired reactions from friendly, neutral, and hostile audiences; sources of speech material and planning the speech; improvement of volume, diction, rate, and platform manners in extemporaneous and manuscript delivery of classroom speeches. Lecture: three hours.
Prerequisite: Public Speaking 205.

207. *Major American Writers* Three Credit Hours

Open to sophomores, juniors, and seniors, but not to English majors.

A study in depth of major American writers from the Colonial period to the present. Lecture: three hours.
Prerequisite: English 102.

210. *General Semantics* Three Credit Hours

Open to freshmen, sophomores, juniors, and seniors.

A psychological approach to the study of language as an abstracting process employing a system of verbal symbols for informative, directive, and affective purposes. Lecture: three hours.

211. *Mythology* Three Credit Hours

Open to sophomores, juniors, and seniors. A study of mythology with special emphasis on Greco-Roman and Northern European myths. A discussion of the leading theories concerning the origins, development, and significance of myths together with the allusive and allegorical use of myth in later literature and art.

Lecture: three hours.

Except for Chaucer (301), *Journalism* (313, 314), *American Literature* (403, 404), *and Methodology and Bibliography* (412), *which are offered every year, the following courses are usually offered in alternate years. Starred courses are offered in* 1970-1971.

*301. *Chaucer* Three Credit Hours

Required of all English majors. Open as an elective to other juniors and seniors.

An introduction to Chaucer's language, narrative skill, and mastery of poetic forms through reading in the original "The General Prologue," selected tales from *The Canterbury Tales, Troilus and Criseyde,* and some of the shorter poems. Lecture: three hours.

302. *Seventeenth Century Poetry and Prose Exclusive of Milton* Three Credit Hours

Open to juniors and seniors.

A study of representative prose prior to the Restoration, of representative poetry of Ben Jonson and his "sons," and of John Donne and the metaphysical poets. Lecture: three hours.

303. *Neoclassicism,* 1660-1744 Three Credit Hours

Open to juniors and seniors.

Dryden, Addison, Swift, and Pope, with some attention to the lesser writers of the period. Lecture: three hours.

304. *The Romantic Movement* Three Credit Hours

Open to juniors and seniors.

A study of the chief features which culminated in the Romantic writings of the early nineteenth century, with special emphasis on the five major poets: Wordsworth, Coleridge, Byron, Shelley, Keats. Lecture: three hours.

*305. *Victorian Poetry and Prose* Three Credit Hours

Open to juniors and seniors.

A study of the period from 1830 to 1900, showing the effects of the Industrial and Scientific Revolutions on traditional attitudes toward art and life through the works of the major writers of the period, with emphasis upon the poetry of Tennyson, Browning, and Swinburne and

upon the prose of Carlyle, Arnold, Huxley, and Pater. Lecture: three hours.

306. *Modern British and American Poetry* Three Credit Hours
Open to juniors and seniors.

Study of the poetry of Yeats, Robinson, Frost, Eliot, and Auden from as extensive a reading of their work as time permits; lectures planned to provide a foundation for future reading in these five and other poets; term essay and class report on a twentieth-century poet other than the above five, each member of the class studying a different poet. Lecture: three hours.

*307. *A Survey of English Drama to* 1800 Three Credit Hours
Open to juniors and seniors.

A detailed study of representative plays (less Shakespeare's) from the medieval beginnings of English drama to the end of the Enlightenment. Lecture: three hours.

*308. *Survey of English Drama* Three Credit Hours
Open to juniors and seniors.

A study of representative plays to show the evolution of the drama from the melodramas and farces of the nineteenth century through the dramatic revival of the 1890's and early twentieth century to post-World War II experimentation. Lecture: three hours.

*309. *The Development of the English Novel to* 1900 Three Credit Hours
Open to juniors and seniors.

Lectures on narrative forms which preceded the novel and on lives and works of major eighteenth and nineteenth century novelists; reading and discussion of selected novels. Lecture: three hours.

*310. *Modern Novel in English* Three Credit Hours

A course in the reading and critical analysis of selected English and American novels by James, Conrad, Schreiner, Lawrence, Anderson, Lewis, Cather, Hemingway, and Faulkner. A term paper on a novel other than those studied in class. Lecture: three hours.

311. *Advanced Composition* Three Credit Hours
Open to selected juniors and seniors.

The development of effective styles of writing through analysis and imitation of masters of English prose.
Prerequisite: English 202 and departmental approval. Lecture: three hours.

*312. *Contemporary British Literature* Three Credit Hours

A study of selected works by major British novelists and poets whose writings are representative of the ideas, literary techniques, and cultural patterns of England and Ireland from World War I to the present. Poets studied: Hardy, Hopkins, Housman, Graves, Spender, Lecture: three hours.

*313, 314. *Journalism* Three Credit Hours Each Semester

A study of the fundamentals of journalism and workshops in news-writing, copyreading, feature writing, layout and makeup, and other aspects of journalism. Lecture: three hours.
Prerequisite: English 201, 202 with C average or higher.

*400. *Milton* Three Credit Hours

Required of all English majors. Open as an elective to other juniors and seniors.

A study of *Paradise Lost* entire, of *Samson Agonistes,* and of representative prose works, with special attention to the philosophical content. Lecture: three hours.

*401, 402. *Shakespeare* Three Credit Hours Each Semester

Required of all English majors. Open as an elective to other juniors and seniors.

An intensive study of representative plays—comedies, histories, tragedies, and dramatic romances—to give the student insight into the greatness of Shakespeare as dramatist, poet, and illuminator of life. Lecture: three hours.

*403, 404. *American Literature* Three Credit Hours Each Semester

Required of all English majors. Open as an elective to other juniors and seniors.

A study of some of the best writing done by Americans from the time of the first settlements down to the present: the first semester covering the literature of the colonial and revolutionary periods and such writers as Irving, Bryant, Hawthorne, Poe, Melville, Emerson, and Thoreau; the second semester covering such writers as Lincoln, Whitman, Emily Dickinson, Mark Twain, Howells, James, Henry Adams, and some of the major writers of the twentieth century. Lecture: three hours.

405. *Backgrounds of English Literature* Three Credit Hours

Open to juniors and seniors.

An examination of the great literary traditions—epic, lyric, romantic, dramatic, narrative, philosophical—in the literature of both the Orient and the Occident from the beginnings to the Fifteenth Century with emphasis on their contributions to English literature. Lecture: three hours.

406. *Backgrounds of English Literature* Three Credit Hours

Open to juniors and seniors.

A continuation of English 405. A consideration of great literary traditions from the Fifteenth Century to the present with emphasis on their contributions to English literature. Lecture: three hours.

*407, 408. *Principles of Literary Criticism in English* — Three Credit Hours Each Semester

Open to departmental seniors and to any student who has completed two full-year courses in English, above the sophomore level, or the approval of the department head.

A study of the classical tradition in criticism, the Renaissance restatement, and neoclassic developments; and of the development of modern criticism. Lecture: three hours.

409. *Writing Poetry* — Three Credit Hours

Open to juniors and seniors.

Analysis of and practice in writing poetry; varied in accordance with the experience and expectation of the students registered. Lecture: three hours.

410. *Writing the Short Story* — Three Credit Hours

Open to juniors and seniors.

Analysis of short stories, followed by practice in writing them. Lecture: three hours.

411. *Applied Literary Criticism* — Three Credit Hours

Open to students who have completed two full-year courses in English abouve the sophomore level or with the approval of the department head.

A careful balancing of theory and practice with emphasis upon application. Critical analysis in class and written analyses prepared outside of class of prose fiction, poetry, and drama. Lecture: three hours.

*412. *Methodology and Bibliography* — Three Credit Hours

Open to arts majors in their senior year.

A course in the methods of research for the student of English and American literature, with emphasis upon basic reference materials, both primary and secondary, upon proper techniques of gathering and evaluating information, and upon the correct form of research papers. Oral reports on specific reference works and an original research project leading to a substantial term essay are required.

The World at a Glance

Department

of

History

Professors: Anger, Phillips, Lee, Martin
Associate Professors: Addington, Goodhart, Fortunato
Assistant Professors: Coussons, Nichols, John, Harris, Cole, Brittain, Fraser, Moore

The Department of History endeavors to give to the student an acquaintance with and an appreciation of our heritage; to enable him to see causes and effects, contrasts and comparisons as shown in the development of civilization; to give him an accurate knowledge of the history of his own country and to familiarize him with its institutions and the democratic ideals which have influenced American life; to acquaint the student who elects this subject with the standard works in its various fields and to prepare him to pursue graduate and professional studies.

A graduate with a major in history will, with his twenty-four hours of selected electives, be well-qualified not only for the responsibilities of citizenship but will also have the broad background necessary for a successful career in business, law, the armed services, the church, and certain fields of science.

Students electing history as a major are required to take in addition to the freshman survey (History 101, 102) the following courses: History 201, 202; History 301, 302; and a total of twenty-one semester hours selected from the junior and senior courses offered by the department. They are also required to take two years of a modern language, Economic Origins, Principles, and Problems, American Government, Elementary Geography, and International Politics, Constitutional Law, or Political Theory. For further details see the tabulation of the curriculum for a History Major, pages 116, 117.

Courses marked with an asterisk (*) are usually offered in alternate years or on demand.

101, 102. *A Survey of American History* — Three Credit Hours Each Semester

Required of all cadets either in their freshman and/or sophomore year.

Survey of American history from the period of discovery to the present; a brief treatment of the colonial period, followed by a more detailed study of such subjects as the causes of the Revolution, the framing of the Constitution, the development of political parties, the sectional conflict, economic progress and problems, and foreign relations; special emphasis placed on understanding the nature of American democracy and the role of the United States in world affairs from 1789 to the present.

201, 202. *A Survey of European Civilization since 1500* — Three Credit Hours Each Semester

Required of sophomores majoring in history, political science, educa-

tion, English, and modern languages. The historical background of contemporary civilization, emphasis on movements and developments of enduring significance; the evolution of national states; the growth of representative and democratic institutions of government; the development of modern capitalism; the origins of current international conflicts; the progress of science, art, and literature.

203, 204. *History of Western Civilization* — Three Credit Hours Each Semester

An elective for those majors who are not required to take History 201, 202.

A survey of the development of western institutions, ideas, and cultures from the beginnings of civilization to the present day. Emphasis is given to economic, social, and cultural forces as well as to purely political and military ones. First semester to 1660, second from 1660 to the present. Each semester may be taken independently.

Credit will not be given for both History 203, 204 and History 201, 202 or History 407, 408.

301, 302. *History of England* — Three Credit Hours Each Semester

Required of all History majors.

A survey of English history from earliest times to the present. Special attention is given the formation of the English people, the continuity of their social and political experience, and the English legacy to Americans. The institutional development of parliament, monarchy, legal system and local government is constantly viewed against the changing background of society and economic activity.

Juniors majoring in history are required to take History 303, 304; History 305, 306; or History 313, 314.

303, 304. *The United States since* 1900 — Three Credit Hours Each Semester

American social, cultural, economic, and political development in the twentieth century; emphasis on the increasing importance of the United States in world affairs and significant political and economic changes.

305, 306. *Europe in the Twentieth Century* — Three Credit Hours Each Semester

A study of the origins and impact of World War I on the major European states; their political, social, and economical development during the 'twenties' and 'thirties'; the origins and course of World War II and its aftermath, the Cold War.

Prerequisite: History 202 or permission of the Department Head.

*307. *History of Europe,* 1815-1900 — Three Credit Hours

A survey of the conflict in Europe of reaction and reform; the Industrial Revolution with its economic, social, and political effects; the efforts toward nationalism; renewed interest in imperialism and other factors in international rivalries.

*308. *Renaissance and Reformation* Three Credit Hours
The Renaissance as a European-wide movement emanating from the Italian peninsula; the religious, political, and social upheavals of the period 1500-1648.

*309 *The American Civil War and Reconstruction* Three Credit Hours
Emphasis on the political, economic, and social developments of the period, with some attention to the military aspects of the war.

*310. *The Era of the French Revolution and Napoleon* Three Credit Hours
A survey of the Old Regime and the causes of the Revolution, followed by an examination of the principal events of the period, stressing the innovations of the Revolutionary governments, the causes of Napoleon's rise to power, his achievements in France and in Europe, the reasons for his eventual downfall.

*311. *The Old South* Three Credit Hours
The political, social, and economic characteristics of the South before 1860 with emphasis on the role of this area in the national scene.

*312. *The New South* Three Credit Hours
The political, economic, and social development of the South since 1877; emphasis on contemporary regional problems and their impact on American life.

313, 314. *Social and Intellectual History of the United States* Three Credit Hours Each Semester
The origin and development of, as well as the interaction between, the customs and arts; the religious, political, and economic ideas that have shaped the American mind and character.

315, 316. *History of Modern Warfare* Three Credit Hours Each Semester
A survey of the development of modern warfare, emphasizing the impact of social, economic, political, and technological forces upon military theory and practice. History 315 is prerequisite for 316.

*317. *Economic History of the United States* Three Credit Hours
A survey of American development from the colonial period to the present with respect to agriculture, business, industry, labor, and related governmental policies.

*318. *Economic History of Modern Europe* Three Credit Hours
A survey of the development of the European economy from the origins of the first Industrial Revolution to the Common Market; particular emphasis upon those areas where increasing industrialization forced governmental action, changed social structure, and created new systems of thought.

Seniors majoring in History are required to take History 401, 402; 403, 404; or History 409, 410, and History 405, 406 or 407, 408.

401, 402. *History of American Diplomacy* Three Credit Hours Each Semester

The heritage, fundamental principles, and progressive development of American foreign policy from colonial times to the present with emphasis on the effect of domestic politics; the role of the United States as leader of the western world.

403, 404. *Latin American History* Three Credit Hours Each Semester

Survey of the economic, cultural, and political development of Latin America; study of the nations as a unit, with special attention to the individuality of each; concentration by each student in his collateral reading on some one country.

405, 406. *History of Colonial America* Three Credit Hours Each Semester

A more detailed treatment of the foundations of American civilization than in History 101; the motives of colonization, the evolution of self-government, the extension of the frontier; economic, social, and religious life, the causes of the Revolution, the problems of the Confederation.

407, 408. *History of the Ancient World and the Middle Ages* Three Credit Hours Each Semester

The Ancient World in the first semester, the Middle Ages in the second: a survey of the history of the Greeks, the Romans, and the people of the Middle Ages, their wars and political institutions, their economic and social life, their cultural and intellectual achievements.

409. *History of the Far East in Modern Times* Three Credit Hours

A survey of the Far East from the first contacts with the West to the present.

410. *History of Modern Russia* Three Credit Hours

A survey of Russian society, politics, and culture from the early modern era to the present. Intensive treatment beginning with the Great Emancipation through the twentieth-century revolutions and the consolidation of Soviet rule.

*411. *South Carolina History* Three Credit Hours

A survey of the political, economic, social, and intellectual developments of South Carolina from its discovery to the present, with emphasis on the relation of the state to the South and to the nation.

420. *Senior Research Project* Three Credit Hours

Undergraduate research project and formal written report. Recommended for students planning graduate study.

Prerequisite: Approval of Department Head and Supervising Instructor.

Geography

309. *Elementary Geography* Three Credit Hours
Required of all History majors.
An introductory course dealing primarily with the elements and principles of geography. Familiarity with important global features and locations is stressed. Topics include: maps, oceans, atmosphere and winds, climate (elements and patterns), landforms, soils and agrciulture, mineral resources and industry.

*310. *Cultural Geography* Three Credit Hours
An application of geographic principles to human activities in selected regions of the world. Cultural patterns are contrasted and compared in the light of the physical environment.

*311. *Economic Geography* Three Credit Hours
The geographic foundations and distribution of economic activities in different parts of the world.

*312. *Historical Geography* Three Credit Hours
A survey of geographic influences in prehistory and history. Various theories of geographical deterinism are evaluated against the backdrop of historical realities.

Computer Operations

Department

of

Mathematics

Professors: Reves, Hutchison, Sutton
Associate Professors: Thompson, Brown, Crumley, McIntyre
Assistant Professors: Hull, Kirkland, Hill, Ingraham, Crabtree, Roughton, Hathaway, Trotter

The stated purpose of The Citadel is the training of young men for service to their country as civilian leaders or as officers in the armed forces, if the need arises. To meet the demands of this modern scientific age such a program of education must include basic studies in chemistry, physics, and mathematics. To this end all students at The Citadel are required to take at least one year of mathematics. In the science and engineering majors two or more years of mathematics must be scheduled.

There is today an ever-increasing demand for college graduates trained in mathematics, on the part of government and industrial laboratories as well as schools and colleges. Students majoring in mathematics have 21 semester hours of electives to be chosen from non-required mathematics courses numbered above 300 or from related fields, including Computer Science. The required courses are one semester hour of Computer Programming, C.S. 201, and the following 51 semester hours of mathematics: 131, 132, 231, 232, 240, 321, 322, 303, 305, 309, 310, 407, 408, 409, 410, 422 (or 420).

The customary mathematical techniques are developed in all the courses of the department, but students are encouraged to obtain results through reasoning processes rather than by stereotyped use of formulas.

101, 102. *Fundamental Mathematics* — Three Credit Hours Each Semester

Required of all Arts freshmen.

A modern treatment of the essential topics of college algebra and trigonometry including the elementary theory of sets, vectors, and matrices.

111. *College Algebra* — Three Credit Hours

Offered on demand.

A brief review of elementary algebra is followed by the study of the binomial theorem, progressions, theory of equations, and determinants.

Prerequisite: Two years of high school algebra.

112. *Trigonometry* — Three Credit Hours

Offered on demand.

Definition and applications of the Trigonometric functions; identities; equations; solution of right and oblique triangles.

Prerequisite: Two years of high school algebra.

119. *College Algebra and Trigonometry* — Five Credit Hours

A modern treatment of the essential topics of college algebra and trigonometry including the elementary theory of sets, vectors, and matrices.

131, 132. *Analytic Geometry and Calculus* — Four Credit Hours Each Semester

Required for B.S. degree in Chemistry, Engineering, Mathematics and Physics.

A unified treatment of the theory and applications of plane analytical geometry and the differential and integral calculus of functions of one variable.

Prerequisite: Mathematics 119, or a satisfactory score on the Mathematics Achievement Test, Level I.

201, 202. *Introduction to Calculus and Analytic Geometry* — Three Credit Hours Each Semester

Elective for majors not requiring calculus.

A basic course in the calculus designed to provide a background for an understanding of the mathematics essential in the fields of modern social science and education. Fundamental ideas are emphasized so that some skill in the formation of new problems in the language of mathematics may be acquired.

Prerequisite: Mathematics 101, 102, or their equivalent.

231. *Intermediate Calculus* — Four Credit Hours

Required for B.S. degree in Chemistry, Engineering, Mathematics and Physics.

The analytical geometry of three dimensions; the differential and integral calculus of functions of two or more variables.

Prerequisite: Mathematics 131, 132.

232. *Differential Equations* — Three Credit Hours

Required for B.S. degree in Chemistry, Engineering, Mathematics and Physics.

Differential equations of the first order and degree; linear differential equations of higher order; miscellaneous differential equations; applications.

Prerequisite: Mathematics 231.

240. *Linear Algebra* — Three Credit Hours

Required of Mathematics majors; elective to others.

Vector spaces; systems of linear equations; bases; subspaces; algebra of matrices; inverses; determinants; orthogonal transformations; quadratic forms.

Prerequisite: Mathematics 132 or Mathematics 202.

303. *Modern Algebra* — Three Credit Hours

Mathematical systems. Groups, rings, integral domains, fields, vector spaces, advanced topics from linear algebra.

Prerequisites: Mathematics 132 or 202.

305. *Modern Geometry* — Three Credit Hours

Special topics from axiomatic geometry; Euclidian geometry; pro-

jective geometry; non-Euclidean geometry; metric projective geometry.
Prerequisites: Mathematics 132 or 202.

307, 308. *Projective Geometry* Three Credit Hours Each Semester

Homogeneous point and line coordinates; principles of duality; cross ratio; projective forms; the conics and their properties.
Prerequisite: Mathematics 231.

309. *Number Theory* Three Credit Hours

The Euclidean Algorithm; prime and composite integers; elementary Diophantine equations; Pythagorean triples; Euler's phi-function; congruences; Euler-Fermat theorems; exponents and primitive roots; quadratic residues.
Prerequisites: Mathematics 132 or 202.

310. *History of Mathematics* Three Credit Hours

A survey of the development of mathematics from the time of the ancients to the present; analysis of causes for the retardation of the advancement of mathematics in different centuries; selected readings from significant areas of mathematics used to show the contributions of mathematics to the development of science.
Prerequisites: Mathematics 131 or 202.

312. *Linear Programming* Three Credit Hours

Topics from linear algebra, the simplex method, duality theory, networks and flows, selected applications.
Prerequisites: Mathematics 131 and Computer Science 201 or the approval of the department head.

321, 322. *Advanced Calculus* Three Credit Hours Each Semester

Required of all Physics, Mathematics, and Electrical Engineering majors.
Vector calculus; Bessel's functions; partial differential equations, Fourier series; LaPlace transforms; functions of a complex variable.
Prerequisite: Mathematics 232.

403, 404. *Functions of a Complex Variable* Three Credit Hours Each Semester

Real and complex numbers; differentiation and integration of a function of a complex variable; mapping; the linear fractional transformation; infinite series; properties of single-valued and multiple-valued functions.
Prerequisite: Mathematics 321, 322.

405, 406. *Probability and Statistics* Three Credit Hours Each Semester

Combinatorial problems; discrete and absolutely continuous random variables; Law of Large Numbers; Central Limit Theorem; estimation;

hypothesis testing; confidence intervals; Maximum Likelihood methods; non-parametric methods and robustness.

Prerequisite: Mathematics 321, 322.

407, 408. *Numerical Analysis* — Three Credit Hours Each Semester

Roots of equations; calculus of finite differences; interpolation formulas; numerical differentiation and numerical integration; numerical solution of ordinary differential equations; simultaneous equations and determinants; advanced mathematical methods for the computer.

Prerequisites: Mathematics 321, 322, C.S. 201.

409, 410. *Topology* — Three Credit Hours Each Semester

Sets and functions; metric spaces; topological spaces; compactness; separation; connectedness; Banach spaces; Hilbert spaces.

Prerequisite: Mathematics 303.

415, 416. *Reading Courses* — Three Credit Hours Each Semester

Directed reading on assigned topics in mathematics; weekly conferences with the instructor; a term paper.

Prerequisite: Exceptional ability and background, and approval of the department head.

422. *Advanced Mathematics* — Three Credit Hours

Open to Seniors majoring in mathematics.

A course which features a variety of topics in advanced analysis to meet the needs of seniors who are not engaged in the senior research project Math 420; selected topics from real and complex function theory.

420. *Senior Research Project* — Three Credit Hours

Prerequisite: Exceptional ability and background, and approval of the department head.

Computer Science

The Department of Mathematics, in cooperation with the Computer Center, offers a group of courses in Computer Science designed to meet the needs of several categories of students.

All students in Business Administration are required to take 305, Computer Principles. They may then elect 306, Management Information Systems, or 311, 312, Operations Research. Since all college graduates should be able to deal effectively with computers, students in Political Science, Education, or other arts majors are encouraged to take this sequence of courses as electives.

Students majoring in Biology or Chemistry may wish to take some or all of the courses listed above, or they may prefer to elect the sequence of courses recommended below for other science students.

Those majoring in Electrical Engineering, Physics, or Mathematics should take 201, Computer Programming, in the sophomore year, followed by 301, Applied Numerical Methods in the junior year. Students who want to prepare themselves for a career in the field of computers may wish to take, in addition, 302, Computer Organization and Programming, as well as E.E. 407, Logical Design of Digital Computers, and E.E. 419, System Simulation.

201. *Computer Programming* One Credit Hour
Required of Electrical Engineering and Mathematics sophomores; open to others.

The application of mathematical methods and digital computers to basic problems in engineering and science; practice in writing programs in Fortran IV.

203. *Computer Programming* Two Credit Hours
Offered only in the Evening Program.

A more comprehensive treatment of the material covered in 201.

301. *Applied Numerical Methods* Three Credit Hours
Analysis of computational problems and the development of computer techniques for their solution. An introduction to numerical methods; error analysis; linear systems of equations; zeros of functions; quadrature; numerical solution of differential equations.

Prerequisites: C.S. 201 or C.S. 203 and Math. 232 or approval of the department head.

302. *Computer Organization and Programming* Three Credit Hours
Logical basis of computer structure; machine representation of information; flow of control; instruction codes; subroutines; linkages; macros; interpretative and assembly systems.

Prerequisite: C.S. 301.

305. *Computer Principles* Three Credit Hours
Required of Business Administration juniors; open to others.

Introduction to programming languages, flow charting, package utilization. Examples and problems in information retrieval, accounting and statistics.

Prerequisites: Bus. Ad. 205 or Biol. 312, or approval of the department head.

306. *Management Information Systems* Three Credit Hours
Design of large scale, computer oriented information systems. Data collection, file organization, directory construction and search techniques. On-line information retrieval, retrieval models and processes.

Prerequisite: C.S. 305.

311, 312. *Methods of Operations Research* Three Credit Hours Each Semester

Applications and elementary theory of selected topics from opera-

tions research. Topics included are linear algebra, linear and non-linear programming, transportation and assignment problems, network analysis, game theory, dynamic programming, queing theory, and markov processes. Application to managerial problems, economic behavior, and military strategy are considered.

Prerequisites: C.S. 201 or C.S. 305, or approval of the department head.

Computer Center

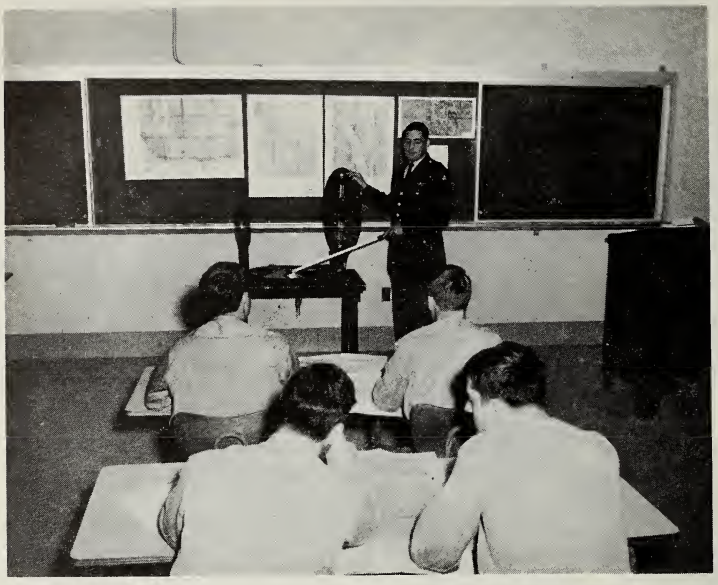
In recent years many important applications for high-speed digital computers have been found in practically all fields of human endeavor. The Computer Center was established for the purpose of offering training in this increasingly important field.

The depth and extent of a student's activities in this field is largely dependent on his field of study and on his own initiative and interest. Languages for communicating with the computer are taught in several courses in the sophomore and junior years. Computer programs are written by students and processed by Computer Center personnel or by student assistants.

Upon completion of a computer programming course and a brief period of instruction in computer operation, a student may process his own programs on the computer.

The IBM 1130 system has the capability of compiling programs written in Fortran, RPG, or Assembler Language. A large library of programs and subroutines is available to support work in Business Administration, Statistics, Engineering, the Sciences, and Mathematics. The computer system has a working memory of 8,192 words and a random access memory of 1,024,000 words. On line peripheral equipment includes a digital plotter, a card reader-punch, and a line printer. Four keypunch machines and a card sorter complete the current equipment inventory.

Through the cooperation of the Medical University of South Carolina, The Citadel Computer Center is able to utilize the computer facilities of the Medical University. These facilities include an IBM 360, located on the Medical University campus, and a remote terminal connected to an IBM 7094.



Basic Instruction in Military Map Reading

Department

of

Military Science

Professor: Hood
Assistant Professors: Puckhaber, Stroud, Adams, Brown, Lape, Moore, Jones, Muller, Coates, Schremp, Wilson

The four-year General Military Science Course of Army ROTC is designed to offer instruction in subjects common to all branches of the U. S. Army. Many of the subjects taught in this department, however, have a close relationship to subjects taught by other departments in the school; such as, U. S. Army and National Security, American Military History, Military Law, and The Role of the United States in World Affairs. In addition, the Department of Military Science organizes and supervises all Army ROTC activities at The Citadel.

The objective of the United States Army Detachment at The Citadel is to provide military science instruction to develop the qualities and attributes required by successful reserve or regular officers of the United States Army, As a result of this instruction, The Citadel cadet receives not only an academic education but a well-rounded background including the best features of the military: a high sense of honor and duty, self-discipline, personal integrity, and the ability to lead men. This training provides The Citadel graduate with the high personal standards and character traits that are continually demonstrated by Citadel Alumni as leaders in the armed services, or in their civilian community.

The four-year course is divided into a Basic Course and an Advanced Course. The first two years comprise the Basic Course, and the last two years, including a six-week summer encampment at a U. S. Army Installation, comprise the Advanced Course. Credit for prior military training may be granted, if appropriate, but the new cadet must report such training to the Military Department as soon as possible on his arrival. Although all students are required by school regulations to take four years of ROTC, not all cadets qualify for commissions in the Armed Forces.

Formal Enrollment Requirements

The basic requirements for formal enrollment in Army ROTC are shown below. These must be fully met before the Professor of Military Science can consider a cadet for formal enrollment in the Army program. Cadets who do not meet these requirements are not entitled to ROTC allowances and will be ineligible for commission.

Be a citizen of the United States.

Be physically qualified under Department of the Army standards.

For the Basic Course, a statement by The Citadel Surgeon that a cadet can perform "normal military duties" usually suffices. An Army-administered physical examination, required for formal enrollment in the Advanced Course, is given to all third classmen (sophomores) in the spring. Waivers of physical defects are granted only in exceptional cases, and then only by authority of the Department of the Army. Any degree of uncorrected vision is acceptable provided visual acuity

is correctable to 20/40 in one eye, and 20/70 in the other eye, to 20/30 in one eye and 20/100 in the other eye, or to 20/20 in one eye and 20/400 in the other eye. Both eyes must be free from any disfiguring or incapacitating abnormality and from acute or chronic disease.

Maintain satisfactory academic standards with his class.

Maintain a satisfactory leadership rating. This rating is determined by the Commandant of Cadets, the Professor of Military Science, and other appropriate Citadel officials.

Be of good moral character. Cadets convicted by civil or military court for offenses other than minor traffic violations are not eligible for formal enrollment without specific approval of the Department of the Army. A cadet may apply for a waiver of conviction, provided the offense was non-recurring and did not involve moral turpitude.

Pass ROTC Qualifying Examination. This examination is administered during the third-class year. Failures cannot be formally enrolled unless a waiver is received, and these are granted only in exceptional circumstances. No repeat examinations are authorized.

Advanced Course

Formal enrollment in the Advanced Course involves both signing a contract with the Government and enlistment in the U. S. Army Reserve. Under the terms of the contract, the signer agrees to accept a commission if it is offered and to serve on active duty for two years or six months, depending upon the needs of the Army. (Current legislation at the time of publication of this bulletin has temporarily suspended the six-month period of active duty, but this may be reinstated at a later date.) As long as the cadet continues his enrollment in the advanced course, he will not be required to participate in Reserve training nor will he be ordered to active duty for training or active duty. If as a result of willful evasion of the terms of his advanced course contract he does not complete the Senior Officers' Training Corps program or if he completes the course of instruction and declines to accept a commission when offered, the cadet may be ordered to active duty in his enlisted grade for not more than two years. Disenrollment by reason of physical or academic deficiency is not construed as "willful evasion," and in such cases, disenrolled cadets will not be ordered to active duty under the terms of their contract.

Army Flight Instruction Program

A small number of first classmen, selected after a physical, mental, and leadership evaluation, will be permitted to participate in the Army Flight Instruction Program as part of their ROTC instruction. This program serves to motivate students to seek a career in Army Aviation, and also serves as a program for screening applicants for Army Aviation training. The program consists of approximately seventy-one hours of ground and flight instruction. Cadets may be awarded the

Federal Aviation Agency private pilot's certificate upon completion of this training. A cadet who receives departmental approval may take this course as an elective and receive three hours of academic credit for it.

Emoluments

The Department of the Army provides certain reimbursements to cadets enrolled in the Army ROTC program. Those cadets enrolled in the Basic Course will have $64 uniform allowances credited to their account each year. Those cadets formally enrolled in the Advanced Course (which includes signing a contract with the Government and enlistment in the Army Reserve) will have $109 uniform allowance credited to their account each year in addition to $50 subsistence allowance paid to them by check each month. During their summer camp they will receive one-half the base pay of a second lieutenant plus $0.06 per mile travel pay to and from camp.

Tuition and other fees are paid for those cadets who are attending The Citadel on an Army scholarship. Basic course scholarship cadets are also paid $50 each month for subsistence.

Distinguished Military Students

Certain cadets who, at the start of their first class year, have clearly demonstrated high moral character and outstanding leadership and academic ability may be selected as Distinguished Military Students and have the option of applying for direct appointment in the Regular Army.

Course of Instruction

MS 101, 102. *First Year Basic* (fourth class year) Four Credit Hours

This course is designed to provide the student with the fundamentals and background necessary to pursue later courses of military instruction. In the first semester, the student receives instruction on the weapons of the infantry platoon and company to include marksmanship training on the school's indoor and outdoor ranges. Later in the semester he learns the organization of the Army from the squad to the division. During the second semester, the freshman learns the relationship between the U. S. Army and the other services and the national government, the organization of the Department of Defense, its relationship to national policy making, and how policy is translated and transmitted to action units in the armed forces. The student receives a minimum of two academic hours per week during the academic year.

MS 201, 202. *Second Year Basic* (third class year) Four Credit Hours

The third class course provides a continuation of instruction in fundamentals, a military history course that reviews American history with emphasis on political and military aspects, and an introduction

to Army operations and basic tactics. The American military history course is a study of the causes of the wars of the United States and the strategy and tactics involved. During the second semester the student is introduced to map and aerial photograph reading, one of the basic tools of a military leader, and begins his study of military tactics.

MS 301, 302. *First Year Advanced* (second class year) Three Credit Hours

The Courses presented in the junior year include military leadership and instructor's training, a study of the different branches of the U. S. Army, communications and counterinsurgency instruction, and a detailed study of small unit tactics. The military leadership and military instructor's training presents the principles involved and requires the student to act as a small unit leader in practical exercises and to present military instruction to his class. During the spring semester the students participate in field training exercises that provide the opportunity for the student to apply the leadership principles and tactical training he has received in the classroom. The field training and classroom instruction during the spring semester prepare the student for the training he will receive during his six weeks summer encampment.

MS 401, 402. *Second Year Advanced* (first class year) Three Credit Hours

During the senior year the student gets detailed instruction in the fields of administration, operations, logistics, and military law, continues his leadership training, and studies the role of the United States in world affairs. In addition, he reviews map reading and receives an orientation on military service to prepare him to take his place as an officer in the U. S. Army. The subjects during this last year of ROTC are designed to provide the student with the basic knowledge and techniques utilized by the junior officer in carrying out his duties and responsibilities. He learns the latest Army regulations and their application to the military unit, and he participates in practice courts which require him to function as a member in a court martial. In his study of the role of the United States in world affairs, the student receives an orientation in geographical and economical factors, their influence on the division of people into nations, and the causes of war. The course orienting the student on military service teaches him the customs of the service, conduct and code of the officer corps, responsibilities and obligations of an officer, and the Army Career Management Program as it pertains to the officer.

MS 410 *Flight Instruction Program* Three Credit Hours

Elective course for MS IV enrolled cadets who pass the required physical and aptitude examinations.

The course includes 35 hours of ground training in: theory of flight, meteorology, federal aviation requirements, navigation and com-

munications, general services and flight safety practices. This is followed by 36½ hours of in-flight instruction including dual and solo flights, cross country flying and final examinations and certification by the Federal Aviation Agency. Cadets may be awarded the FAA private pilot's certificate upon completion of this training.

Language Laboratory—Listening and Learning

Department

of

Modern Languages

Professors: H. D. G. Smith, Pappas, Johnson
Associate Professors: Smith, Crespil
Assistant Professors: Brown, Mattos, Pieper, Warren, Gundel, Frohlich. DeMille, Stacy

A student majoring in Modern Languages must attain a thorough knowledge of one language, spoken and written, a reasonable degree of competence in a second, and a good understanding of the important writers, the literary developments, and the cultures which these languages represent. Upon successful completion he is prepared to do graduate work in the language chosen for his major work.

The five modern languages offered by the department are among the most important because of the wealth of material, both literary and scientific, which has been published in them, and because of the fact that most educated individuals, no matter what their mother tongue may be, are fluent in either English or one of these five.

Students who elect languages as their major field must satisfactorily complete at least eight courses (i.e., forty-eight semester hours) in languages, including, for one language, at least three courses above the intermediate level, of which two must be the Survey of French Literature, German Literature, or Spanish Literature and advanced composition and conversation in the same language. The exact sequence of courses may vary according to the language chosen for major work and the point at which college work in languages was begun. Students wishing to take a language course as an elective may take any course for which they have done the prerequisite work.

The Language Laboratory constitutes an integral part of the Elementary and Intermediate Courses in the Department of Modern Languages. It provides intensive practice in speaking, listening and understanding by means of tape recordings designed to provide greater oral-aural facility in the various modern foreign languages offered. Exercises in the laboratory are closely integrated with classroom work.

For juniors the following non-departmental *electives* are recommended:

English 203, 204, *The English Language*
Philosophy 201, *Introduction to Philosophy*
Philosophy 309, *Modern Philosophy*
Psychology 302, *Educational Psychology*
History 305, 306, *Europe in the 20th Century*
History 403, 404, *Latin American History*
History 410, *History of Modern Russia*
Political Science 414, *Latin American Affairs*

French

101, 102. *Elementary French* — Three Credit Hours Each Semester

For students who elect French and have entered The Citadel with less than two units of the language.

Pronunciation and elements of French grammar; written and oral exercises; laboratory exercises.

201, 202. *Intermediate French* — Three Credit Hours Each Semester

For students who have completed French 102, or have entered The Citadel with two or three units of the language.

Composition and conversation based on the reading material; grammar review to correct faults in usage; laboratory exercises.

301, 302. *Introductory Survey of French Literature* — Three Credit Hours Each Semester

A general survey of French Literature from its beginnings to the present time; extensive reading, reports, discussion in French.
Prerequisite: French 202 or permission of the department head.

305, 306. *Advanced French Composition and Conversation* — Three Credit Hours Each Semester

Advanced instruction in the practical use of French, stressing current topics of interest and striving for oral and written fluency. Emphasis on rapid reading of more difficult prose than in the earlier courses, on the development of style, and, in 306, on the cultural development of French speaking countries, their history, life and thought.
Prerequisite for French 305: French 202 or permission of the department head.
Prerequisite for French 306: French 305 or permission of the department head.

403, 404. *Eighteenth Century French Literature* — Three Credit Hours Each Semester

Political and philosophical thought in the eighteenth century, traced through the writings of Montesquieu, Voltaire, and Rousseau; the beginnings of Romanticism as shown in Rousseau and other writers; lectures in French; collateral readings and reports.
Prerequisite: French 202 or permission of the department head.

405, 406. *The Classical Period of French Literature* — Three Credit Hours Each Semester

The literature of the seventeenth century, that of France's most distinctive and in many respects finest contribution to the world's literature and culture; special attention given to the plays of Corneille, Racine, and Molière.
Prerequisite: French 202 or permission of the department head.

407, 408. *Nineteenth Century French Literature* — Three Credit Hours Each Semester

French literature from Chateaubriand to Zola and Anatole France; the Romantic, realistic, and naturalistic movements, with special emphasis on Balzac, Hugo, and Flaubert; lectures in French, discussion, outside reading.
Prerequisite: French 202 or permission of the department head.

German

101, 102. *Elementary German* — Three Credit Hours Each Semester

For students electing German and having entered The Citadel with less than two units of the language.

Pronunciation and the elements of German grammar; written and oral exercises; laboratory exercises.

201, 202. *Intermediate German* — Three Credit Hours Each Semester

Review of elementary grammar; reading and conversation in German; laboratory exercises.

Prerequisite: German 102 or two entrance units.

203, 204. *Scientific German* — Three Credit Hours Each Semester

For students taking the chemistry, physics, or pre-medical course. First-year grammar study continued; translation of texts in various sciences; special stress on sentence structure and word-building.

Prerequisite: German 102 or two entrance units.

301, 302. *Introductory Survey of German Literature* — Three Credit Hours Each Semester

A general survey of German Literature from its beginnings to the present time; extensive reading, lectures, reports, discussion in German.

Prerequisite: German 202 or permission of the department head.

303, 304. *German Literature of the Nineteenth Century* — Three Credit Hours Each Semester

Representative works of outstanding poets, novelists, and dramatists, with discussion of the literature of the period; assigned reading and reports.

Prerequisite: German 202 or permission of the department head.

305, 306. *Advanced German Composition and Conversation* — Three Credit Hours Each Semester

Advanced instruction in the practical use of German, stressing current topics of interest and striving for oral and written fluency. Emphasis on rapid reading of more difficult prose than in the earlier courses, on the development of style, and, in 306, on the cultural development of German speaking countries, their history, life, and thought.

Prerequisite for German 305; German 202 or permission of the department head.

Prerequisite for German 306: German 305 or permission of the department head.

401, 402. *Goethe's Faust* — Three Credit Hours Each Semester

Goethe's greatest drama, *Faust,* studied in connection with his life and

with regard to his message today; its genesis and growth; reading and discussion of Part I and Part II; Faust das Puppenspiel and its relation to Goethe's *Faust;* lectures, reading, and reports.
Prerequisite: German 202 or permission of the department head.

Portuguese

101, 102. *Elementary Portuguese* — Three Credit Hours Each Semester

Pronunciation and the elements of Portuguese grammar; written and oral exercises; laboratory exercises.

201, 202. *Intermediate Portuguese*

Completion and review of elementary grammar; reading of literary texts; conversation in Portuguese; laboratory exercises.
Prerequisite: Portuguese 102.

Russian

101, 102. *Elementary Russian* — Three Credit Hours Each Semester

Pronunciation and elements of Russian grammar; written and oral exercises; laboratory exercises.

201, 202. *Intermediate Russian* — Three Credit Hours Each Semester

A continuation of Russian 101, 102, with emphasis on vocabulary building, the development of reading skill, and conversation; laboratory exercises.
Prerequisite: Russian 102.

Spanish

101, 102. *Elementary Spanish* — Three Credit Hours Each Semester

For students electing Spanish and having entered The Citadel with less than two units of the language.

Pronunciation and elements of Spanish grammar; written and oral exercises; laboratory exercises.

201, 202. *Intermediate Spanish* — Three Credit Hours Each Semester

A course to develop further the general understanding of the language, oral and written; review of grammar; reading and discussion in Spanish; laboratory exercises. Prerequisite: Spanish 102 or two entrance units.

301, 302. *Introductory Survey of Spanish Literature* — Three Credit Hours Each Semester

A general survey of Spanish Literature from its beginnings to the present time; extensive reading, reports, discussion in Spanish.
Prerequisite: Spanish 202 or permission of the department head.

303, 304. *Spanish-American Literature* — Three Credit Hours Each Semester

Leading works from Central and South America, with both individual and class reading; reports; discussion in Spanish.

Prerequisite: Spanish 202 or permission of the department head.

305, 306. *Advanced Spanish Composition and Conversation* — Three Credit Hours Each Semester

Advanced instruction in the practical use of Spanish, stressing current topics of interest and striving for oral and written fluency. Emphasis on rapid reading of more difficult prose than in the earlier courses, on the development of style, and, in 306, on the cultural development of Spanish speaking countries, their history, life and thought.
Prerequisite for Spanish 305: Spanish 202 or permission of the department head.
Prerequisite for Spanish 306: Spanish 305 or permission of the department head.

401, 402. *Spanish Literature of the Golden Age* — Three Credit Hours Each Semester

Literature of the late sixteenth and seventeenth centuries; the age producing the characters of Don Quixote and Don Juan; a study of the works of Cervantes, Lope, Tirso, Calderon, and others; reports; discussion in Spanish.
Prerequisite: Spanish 202 or permission of the department head.

All Modern Languages

421, 422. *Advanced Individual Reading Course* — Three Credit Hours Each Semester

Open to seniors only, and only with permission of the department head.

Classical Languages

(Offered when demand justifies)

101, 102. *Elementary Greek* — Three Credit Hours Each Semester

Fundamentals of the Greek language.
Recommended for students preparing for the study of medicine or theology.

201, 202. *Intermediate Greek* — Three Credit Hours Each Semester

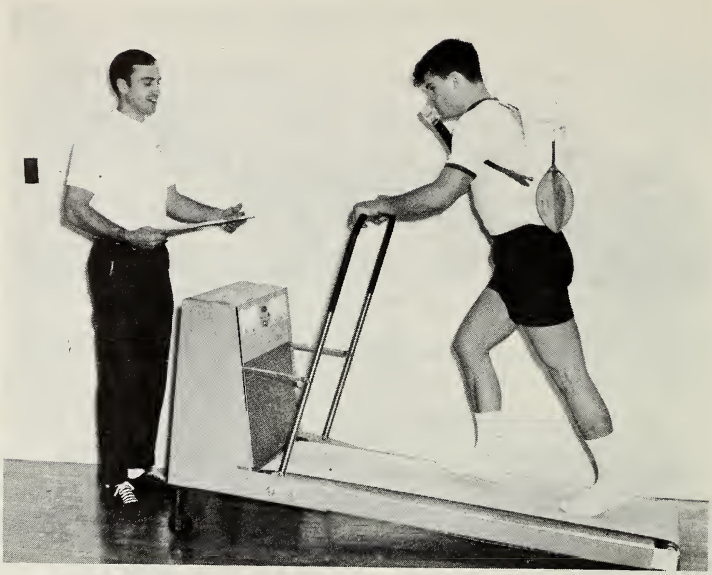
Selections from Xenophon or the New Testament.
Prerequisite: Greek 102.

101, 102. *Elementary Latin* — Three Credit Hours Each Semester

Latin gammar and translation. Course dependent upon the background of the student.
Recommended for pre-law students.

201, 202. *Intermediate Latin* — Three Credit Hours

Translation from Latin prose writers.
Prerequisite: Latin 102 or two entrance units.



Physiology of Exercise

Department

of

Physical Education

Professor: Dellastatious
Associate Professor: Feigl
Assistant Professors: Styles, Smyth, Stewart, Ezell, Hamilton

The purpose of the Department of Physical Education is threefold:

(1) Professional Physical Education Program: Prepare and qualify Physical Education majors for secondary-school teaching in the fields of physical education, athletics, and a selected minor.

(2) Required Physical Education Program: Organize and administer a two-year required physical education program for the Corps of Cadets.

(3) Intramural Program: Organize and administer an intramural program for the Corps of Cadets.

The Physical Education Major

The Department of Physical Education-Intramural Athletics requires the following physical education courses for its physical education majors:

201. *Introduction to Physical Education* Three Credit Hours
An introductory survey of physical education; historical background, nature, scope, and function of physical education; its aims, objectives, and principles.

204. *Sports I* Three Credit Hours
Teaching methods with applied techniques in wrestling, soccer, and volleyball.

301. *Personal and Community Health* Three Credit Hours
A body of knowledge from the biological and social sciences which is essential for sound decisions in health maintenance and conducive to proper sense of health values for the individual and the community.

303. *Basketball* Two Credit Hours
Comparative study of defensive and offensive systems of team play; development of basic individual skills and techniques; teaching and coaching; rules and officiating. Lecture: one hour a week; laboratory: two hours a week.

306. *Sports II* Three Credit Hours
Theory and practice in the fundamentals of teaching and coaching in baseball, track-field, and tennis. Administration and execution of meets and tournaments.

308. *Gymnastics and Tumbling* Two Credit Hours
Theory and practice of gymnastics, tumbling, and developmental activities with respect to teaching methods, skills, and the conduct of gymnastic meets. Lecture: one hour; laboratory: two hours.

400. *Directed Teaching*
A requirement for certification; observation and teaching in ap-

proved high schools under approved supervising teachers; supervision by college instructor.

The physical education major must be classified as a senior, he must have passed all physical education courses prior to Directed Teaching and must have served as an assistant instructor in the RPE (101) first semester program.

401. *Organization and Administration of Physical Education* — Three Credit Hours

Organization: delegation of authority and responsibility; use of the democratic method; formation of teams, tournaments, and leagues; program aims and objectives; curriculum building; course construction; lesson planning.

Administration: selection, purchase, and care of equipment; office policies and systems, budgeting in finances; publicity; team and game management.

405. *Health Education* — Three Credit Hours

Organization and administration of a school health program with specific attention to methods and techniques of health instruction.

402. *Care and Prevention of Athletic Injuries* — Two Credit Hours

Discussion, demonstration, and application in the skills and procedures for the caring and prevention of athletic injuries.

403. *Adaptive Physical Education* — Two Credit Hours

Identification of various physical, mental, and emotional disabilities with implications to physical education. Procedures of individual posture analysis; lesson planning, individual corrective exercise; motivation for improvement.

407. *Football Theory* — Two Credit Hours

Analysis and evaluation of offensive and defensive tactics, formations, and plays; individual techniques and fundamental skills in position play; teaching materials and methods; coaching; rules and rule interpretations.

412. *Tests and Measurements in Physical Education* — Two Credit Hours

The place and importance of tests and measurements in the physical education teaching process; the use of scientific measurement now available in physical education.

414. *Kinesiology* — Two Credit Hours

The anatomical and mechanical analysis of functional posture and motor performance (physical skills), for the purpose of understanding and recognizing normal and faulty movement as based on the latest available scientific information.

416. *Physiology of Exercise* — Three Credit Hours

The latest in research findings pertaining to man's performance in muscular activity for a better understanding of the response of the body to exercise.

Prerequisites: Biology 101, 202, 303, and 304.

420. *Senior Research Project* Two Credit Hours
A research problem conducted by physical education majors as an independent study. Topic, Technique and procedure for this study must be approved by Department Head.

Required Physical Education

All freshmen and sophomore cadets are required to participate in and pass four semesters, or the equivalent, of Required Physical Education during the freshman and sophomore years.

FOURTH CLASSMEN (Freshmen)

1. *Swimming Test*

Prior to fall semester registration, all freshman cadets must participate in a swimming test which consists of jumping feet first into deep water, treading water, swimming 25 yards using the crawl stroke. Each cadet will be evaluated on his execution of each test item. Cadets who fail the swimming test will be required to participate in a beginning swimming class for a five-week period beginning the second week of the fall semester. All freshman cadets are required to participate in a swimming class for eight weeks during the spring semester.

2. *R.P.E. Freshman Activities*

All freshman cadets must enroll and participate in two semesters (or the equivalent) of freshman R.P.E. All freshman cadets must participate in a physical conditioning course during the fall semester. During the spring semester, freshman cadets must participate in a combination swimming-wrestling course, each eight weeks in duration. All freshman physical education sports-activity classes meet twice weekly.

THIRD CLASSMEN (Sophomores)

All sophomore cadets must enroll and successfully complete two semesters of Sophomore Required Physical Education. The following sports activities are taught in the sophomore R. P. E. program:

1. Archery
2. Badminton
3. Bowling
4. Fencing
5. Golf
6. Handball - Paddle Rackets
7. Scuba diving
8. Senior Life Saving
9. Tennis
10. Trampolining
11. Weight Training

A cadet may not receive credit toward the R. P. E. requirement by participating in and passing the same sports activity more than once.

All sophomore sports activity classes meet once a week.

Any sophomore cadet wishing to waive the sophomore R. P. E. requirement may do so by passing a proficiency test which consist of two parts—a written test and a performance test. A cadet must score a passing grade (C or higher) on the written test in order to be considered proficient enough to participate in the performance test.

A sophomore cadet wishing to use the R.P.E. Exemption Program should register for the program at least one week prior to the registration date for the following semester at the office of the Physical Education Department.

Intramurals

The intramural program represents an integral part of the cadet's life, and is, therefore, required of all cadets not involved in intercollegiate sports or competitive athletic clubs. The program consists of twenty-three different activities including both individual and team sports which lead to physical and mental fitness. All teams activities have been separated for freshmen and upperclass participation to give all cadets an opportunity to engage in the more vigorous competitive sports.

The requirement by class is as follows:

1st Class—1 individual or dual sport.

2nd Class—1 individual or dual sport.

3rd Class—2 team sports.

4th Class—1 team sport each semester.

Participation will lead not only to the desired leadership qualities, but also to the development of "espirit de corps." The wide variety of activities gives a cadet opportunity to develop necessary skills that will enable him to meet his immediate needs and to participate in an activity many years after graduation.

Fall	*Winter*	*Spring*
Flag Football (UC)	Bowling (FR)	Handball (Singles)
Flag Football (FR)	Basketball (UC)	Swimming
Volleyball (UC)	Wrestling	Softball (FR)
Volleyball (FR)	Basketball Freethrow	Softball (UC)
Tennis	Table Tennis	Gymnastics
Handball (Doubles)	Paddle Rackets (Singles)	Weight Lifting
Bowling (UC)	Paddle Rackets (Doubles)	Skish
Basketball (FR)	Basketball Golf	Badminton
Steeplechase		Sigma Delta Psi
Track		
Golf		Water Polo

Citadel Cadets and their dates at The Citadel Beach Club.

Exploring the Laws of Physics

Department

of

Physics

Professors: Hanson, Bender
Associate Professor: Johnson
Assistant Professors: Bailey, Meeks, Voegeli, Byrne, Byrd
Instructor: Hines

It is the purpose of the Department of Physics to offer to all students at The Citadel a fundamental course in one of the basic physical sciences, and to offer to students specializing in other departments such advanced courses in physics as are necessary to meet their needs. To students taking their major work in the department, it offers a program of courses sufficient to enable them to enroll as graduate students in full standing at the leading universities, or to fill positions as physicists in the government service and in industrial laboratories.

The rooms of the department are located in the east wing of Bond Hall. On the first floor is a large, air-conditioned laboratory for advanced physics courses, a photographic dark room, and a machine shop for instrument repair and maintenance. A room containing D. C. generators and the main electric switchboard is also located on this floor. On the second floor are a large air-conditioned lecture room seating 110, four smaller lecture rooms, two of which are air-conditioned, one classroom, and two laboratories for elementary physics. Additional laboratories, two of which are air-conditioned, are located on the third floor. At all lecture desks and laboratory tables, electric power, both A.C. and D.C. of the required voltage, is available from direct current generators or the commercial A.C. power supply. Gas, water, and compressed air outlets are also available where needed in lecture rooms and laboratories. Distribution panels, connected with the main electric switchboard, are located in the advanced laboratories. The lecture rooms and laboratories are conveniently arranged and well equipped with modern apparatus to carry out the department policy of frequent student experimental work and extensive lecture demonstrations.

The department sponsors a Student Section of the American Institute of Physics to provide extracurricular activities and training for physics students.

To meet the needs of different groups of students three sequences of courses in beginning physics are offered: (a) Physics 110, 211, 212; (b) Physics 205, 206, 207 for premedical or science majors who do not take the calculus; (c) Physics 203, 204, a terminal science course for liberal arts, business administration, education and physical education students who do not elect one of the other physics programs. The objectives, methods, and, to some degree, the content of these programs are different. It is recommended that students, whenever possible, complete the physics program on which they embark.

Students taking physics as their major work are required to take all courses offered by the department for physics majors. In addition they are required to take Mathematics 321, 322. For valid reasons the study of the modern language, (German, Russian, or French)

may be postponed to the junior or senior year. Physics majors are advised to take scientific German and to choose their electives from the advanced courses offered in the Department of Chemistry and the Department of Mathematics.

For physics majors, up to six credit hours in the courses numbered above 300 in mathematics (except 301, 302, 309, or 310), chemistry, or electrical engineering may be substituted for an equal number of required credit hours in physics courses numbered above 300.

101. *Modern Physics Lectures* — One Credit Hour

Required of all freshmen majoring in physics. A non-mathematical course consisting of lectures on modern physics topics. Class notes and library reading will be required.
Lecture: one hour.

110, 211, 212. *General College Physics* — Four Credit Hours Each Semester

Required of all students majoring in engineering, mathematics, chemistry, or physics

Mechanics, electricity and magnetism, heat, sound light and modern physics covered with no assumption of prior knowledge of physics; laboratory of about fourteen individual quantitative experiments each semester based on fundamental principles. Instruction is given in the use of the slide rule which is required equipment. Lecture: three hours; laboratory: two hours.

Prerequisite: Math 121. (May be taken concurrently with Math. 121 with permission of the heads of the student's major department and the Department of Physics.)

201. *Astronomy* — Three Credit Hours

A study of general astronomy. The nature and behavior of the earth, the other planets, stars and stellar systems will be studied.

Prerequisite: Math. 101 or equivalent.

202. *Astronomy* — Three Credit Hours

A more intensive study of the subjects of Astronomy 201 with emphasis on such selected topics as spectroscopic analysis of stars and stellar systems.

Prerequisite: Astronomy 201 and Math. 119 or equivalent, and Physics 204 or 212.

203, 204. *Introduction to College Physics* — Four Credit Hours Each Semester

A course similar to Physics 110, 211, 212 adapted primarily to the needs of students who expect to take no additional courses in the physical sciences and including the recent developments in physics bearing directly on everyday life; laboratory periods devoted to individual experiments performed by the students, experiments conducted

by the instructor, solution of problems. Lecture: three hours; Laboratory: two hours.

Prerequisite: This freshman course may be taken by those whose score on the mathematics section of the College Board SAT places them in the upper seventy-five per cent of the group. This course may be taken by all students beyond the freshman year.

205, 206, 207. *College Physics* Four Credit Hours Each Semester

Required of all premedical and science students who do not take Physics 110, 211, 212.

A course of elementary nature designed to stress the principles and the unifying concepts of classical and modern physics, especially those of particular interest to the medical profession, and to prepare premedical students to meet the requirements for admission to the better medical schools; approximately fourteen two-hour laboratory periods each semester devoted to student experiments dealing with the topics of mechanics, molecular physics, heat, wave motion, optics, electricity and magnetism, and nuclear physics. Lecture: three hours; laboratory: two hours.

Prerequisite: Math 102 or 231.

301. *Introduction to Meteorology* Three Credit Hours

Structure of the atmosphere and of weather systems with an introduction to the physical laws which govern weather processes and atmospheric motion. Lecture: three hours

Prerequisite: Physics 204 or 211.

302. *Atmospheric Mechanics* Three Credit Hours

Hydrostatics; thermal and pressure fields; equations of motion; geostrophic, gradient and thermal winds; kinematics; discontinuities. Lecture: three hours.

Prerequisite: Meteorology 301.

309. *Optics* Three Credit Hours

Required of all physics majors; open to others.

Principles of gemetrical and physical optics; the general equations of wave motion; reflection, refraction, dispersion, interference, diffraction, and polarization. Lecture: three hours.

Prerequisites: Physics 212, Math 231.

310. *Heat and Thermodynamics* Three Credit Hours

Required of all physics juniors; open to others.

Kinetic theory of gases and transport phenomena, thermodynamics of gases, Maxwell-Boltzmann statistics, thermoelectricity and theory of thermal radiation. Lecture: three hours.

Prerequisite: Physics 212.

311, 312. *Electricity and Magnetism* — Three Credit Hours Each Semester

Required of all physics majors; open to others.

The electrostatic field and its effect on matter, the properties of magnetic fields and magnetic materials, electromagnetic effects, vector potentials, displacement currents, Maxwell's equations, Lorentz force on particles, periodic currents. Lecture: three hours.

Prerequisites: Physics 212, Math 231.

313, 315, 316. *Laboratory Physics* — Two Credit Hours Each Semester

Required of all physics majors; open to others.

Laboratory experiments and/or projects requiring the use of the basic instruments for the measurement of mechanical, electromagnetic, optical, and thermal quantities, and covering the principal branches of physics: mechanics, heat, electricity and magnetism, optics, atomic and nuclear physics; the experiments performed in any semester determined by the interests of the students and the theoretical courses being taken concurrently.

Prerequisities: Physics 212; enrollment in at least one physics course numbered above 300.

318. *Electronics* — Four Credit Hours

Required of all physics majors; open to others.

Characteristics of electron tubes and transistors and their use as rectifiers, detectors, amplifiers, and oscillators; a course designed to introduce students to the use of electron tubes and transistor circuits in the field of measurement and instrumentation.

Lecture: three hours; laboratory: two hours.

Prerequisites: Physics 212, Math 231.

401. *Modern Physics* — Three Credit Hours

Required of all physics seniors; open to others.

The background of modern atomic physics, Maxwell's equations for electromagnetic waves, charged atomic particles, photoelectricity, X-rays, special theory of relativity, atomic spectra, and atomic structure. Lecture: three hours.

Prerequisites: Physics 212, 309; Math 231.

402. *Nuclear Physics* — Three Credit Hours

Required of all physics seniors; open to others.

A continuation of Physics 401 to include natural radioactivity, isotopes, artificial radioactivity, and nuclear disintegration, nuclear reactions, detection of charged particles and radiations, cosmic rays and fundamental particles. Lecture: three hours.

Prerequisite: Physics 401.

403, 404. *Advanced Laboratory Physics* — Two Credit Hours

Required of all Physics Seniors.

A course accompanying Physics 401 and 402. Experiments of an advanced nature especially in atomic and nuclear physics to include electron emission, determination of fundamental constants, conduction of electricity through gases, X-rays, radioactivity, detection, counting, and analysis of nuclear radiations. Laboratory: two hours.

*411, 412. *Mechanics* Three Credit Hours

Required of all physics majors; open to others.

Newtonian mechanics treated on an intermediate level, using vector calculus and tensor algebra. Topics covered include: motion of a particple and of systems of particles, moving coordinate systems, rigid body rotation, gravitation, mechanics of continuous media, equations of Lagrange and Hamilton, and theory of small oscillations. Lecture: three hours.

Prerequisites: Physics 212, Math. 231.

*420. *Senior Essay* Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 94.

Discussion on Constitutional Law

Department

of

Political Science

Professors: Arcilesi, Hodges
Assistant Professors: Kingston, Moreland*, Payne, Benson, Wardlaw, Baker, Beebe, Marshall, Steed

The political science curriculum is designed to give the student some understanding of the political, social, and economic aspects of the modern world. It emphasizes a spirit of scientific inquiry. Academic courses most commonly required for admission to the best graduate schools in political science, economics, and history are available to its majors. The majority of students interested in the study of law choose political science as their major subject area. It has a strong appeal for those who anticipate administrative careers in government, particularly, in the Foreign Service and the numerous intelligence agencies of the national government. The required course of study for political science majors is tabulated in the curriculum of the department on pages 126, 127.

201. *American National Government* Three Credit Hours

A study of the American constitutional background, the rights and liberties of persons, political opinions and voting behavior, political parties and pressure groups, the organization and the role of the President, the Congress, and national courts in policy formation and administration.

202. *State and Local Government* Three Credit Hours

The course is concerned with the role of the states in the American constitutional system, the institutional organizations of state governments and the relationships between these agencies and those of the political sub-divisions.

301, 302. *International Law and Organization* Three Credit Hours Each Semester

Required of Political Science Juniors. Open to others receiving permission of the instructor.

A survey of international law as developed through treaties, customs, usages, and decisions of national and international tribunals; a study of the League of Nations, the United Nations, and the international machinery for the promotion of harmony between states.

Political Science 308 may be substituted for 302.

303. *American Foreign Relations* Three Credit Hours

Required of Political Science Juniors. Open to others receiving permission of the instructor.

A study of the organization of the American Government for the conduct of foreign relations; the institutions and elements in the making of foreign policy; emphasis on the important problems and developments of the post-war years.

304. *American Parties and Politics* Three Credit Hours

Required of Political Science Juniors. Open to others.

An analysis of the dynamics of American politics, with particular emphasis upon the factors entering into the formulation of public opinion, the role of pressure groups, and the operations of the party system.

305. *Public Administration* Three Credit Hours
An introduction to the role of administration in the governmental process which considers principles of administrative control, personnel, and fiscal management.
Prerequisite: Political Science 201.

307. *Comparative Politics* Three Credit Hours
Required of all Political Science Majors. Open to others with permission of the instructor.
An analysis of various political systems in terms of institutions, structure, and function. Emphasis on the development of common criteria for the evaluation and comparison of these divergent systems.

308. *Problems in International Law* Three Credit Hours
An advanced survey of the elements of international law and the application of basic principles. Emphasis will be given to an in depth study of jurisdiction over aliens, state liability for official acts, international reclamations, and the regulation of international hostilities.
Prerequisite: Political Science 301.

309. *American Political Thought* Three Credit Hours
A study of the basic political ideas which have developed in response to American constitutional, social, and economic conditions.

310. *American Presidency* Three Credit Hours
Open to Juniors and Seniors.
A study of the modern presidency with attention to its origins and its historical and constitutional development. Emphasis is placed on an examination of the various roles and functions of the President and on an analysis of Presidents in action.

311. *The Legislative Process* Three Credit Hours
Organization and procedures of a legislative body. Its role in policy formation and its relationships with other parts of the political and governmental system.

401. 402. *Constitutional Law* Three Credit Hours Each Semester
Required of Political Science Seniors. Open to others receiving permission of the instructor.
A study of the underlying and basic principles of the Constitution as reflected in the leading decisions of the United States Supreme Court.

405. *International Politics* Three Credit Hours
Required of all Political Science Seniors. Open to others receiving permission of the instructor.

An analysis of the international system, of the nation-state, the role of power in international politics, and the goals and instruments of foreign policy.

406. *International Politics* Three Credit Hours
Required of all Political Science Seniors not taking Political Science 413.
An investigation of current international relations, especially the problems and policies of the Communist Bloc, the North Atlantic Alliance, the European Common Market, and the less developed countries. These problems and policies are considered with particular attention to their relations with East-West rivalry.

407, 408. *Political Theory* Three Credit Hours Each Semester
Required of Political Science Seniors. Open to liberal arts seniors.
Major theoretical writing from Plato to Thomas Hill Green; emphasis on a comparison of basic ideas and on the relationship between theories and contemporary problems.

409. *Far Eastern Affairs* Three Credit Hours
Open to Juniors and Seniors.
A survey of China from 1911 to the present, with emphasis on the rise of Communism in China, on the structure and operation of the Chinese People's Republic, and on contemporary Chinese foreign policy.

410. *Southeast Asian Affairs* Three Credit Hours
Open to Juniors and Seniors.
A study of the development of selected countries in the area with emphasis on the problems of transition, ideological orientations, roles in the cold war and the importance of the area to the national interest and foreign policy of the United States.

413. *Urban Politics* Three Credit Hours
This course is a study of mass participation in urban political affairs, political parties on the local level, the municipal reform movement, and alternative approaches to the study of local political systems. Emphasis is placed on the problems of local governments in metropolitan areas.

414. *Latin American Affairs* Three Credit Hours
Open to Juniors and Seniors.
A study of the Latin American power elements and related problems; emphasis on the relationships and importance of the area to the United States.

415. *Russian Affairs* Three Credit Hours
Open to Juniors and Seniors.
An analysis of the geographic, demographic, economic, political,

psychological, and military bases of Soviet power. Emphasis on the objective techniques, and operations of Soviet foreign policy.

416. *National Policy and Administration* Three Credit Hours
Open to Juniors and Seniors.

Analytical and critical survey of the process of formulating and administering basic domestic policy, the role and influence of special interest groups; the problems of the President and Congress in formulating general interest programs.

417. *African Politics* Three Credit Hours
Open to Juniors and Seniors.

An analysis of the politics and modernization in Africa; emphasis on the newly independent states of the continent and their political, cultural, demographic, and historical characteristics; and consideration of tribal factors influencing the process of modernization.

418. *Middle Eastern Affairs* Three Credit Hours
Open to Juniors and Seniors.

A survey of the Middle East; a study of the power elements and related problems; emphasis on the role of the area in American foreign policy.

420. *Senior Research Project* Three Credit Hours
Required of all seniors as a prerequisite to graduation. An approved three credit hour elective may be substituted.

422. *Public Opinion and Propaganda* Three Credit Hours

A systematic analysis of the political process incorporating the technique of opinion survey design and analysis; the analysis of voting behavior; and the study of the mechanisms for influencing opinion through the use of modern techniques of propaganda.

The Greater Issues Series was inaugurated in 1954 to bring to The Citadel distinguished individuals who could speak from personal knowledge and experience on current subjects of vital interest. Each speaker is invited to discuss some aspect of public affairs with which he is identified and is especially knowledgeable and on which he can speak with authority.

The 1969-70 Greater Issues Series presented an outstanding group of important persons who discussed from personal knowledge and experience many of the issues that disturb and motivate today's world. Among them were Lt. Gen. Thomas S. Moorman, U. S. Air Force, Superintendent of the U. S. Air Force Academy; and Lieutenant Governor John C. West of South Carolina.

THE FIRST YEAR

The year begins for new cadets when they first pass through the sally port of their Barracks and report for duty at The Military College of South Carolina. The next few days during Plebe Orientation Week are busier than the new fourth classmen ever believed possible. Selected membrs of the uppr classes who are designated as the training cadre lead the new cadets through the initial rigorous training and supervise every moment of their day.

During this period, the newcomer receives the necessary training to prepare him to take his place in The South Carolina Corps of Cadets. Each day is filled with a variety of activities: the new plebe attends classes in the customs and traditions of The Citadel, the College and Cadet Regulations, the Cadet Honor System, military courtesy, wearing of the uniform, room arrangement, close order drill, physical training, and the Army and Air Force ROTC programs. Additionally, he accomplishes the numerous administrative tasks to prepare him for cadet life and the academic year to include assignment to his company and room, equipment and clothing issues, fittings for uniforms, conferences with his military and faculty advisors, and class registration for the fall semester. By the end of the first week, the new cadet is no longer a stranger to The Citadel. He is beginning to feel like a cadet; and yes, look like one too. He takes pride in his accomplishments for, even at this early date, he has gained familiarity with military courtesy and discipline through constant practice under the critical eyes of his training cadre. He is well on the way toward mastering the fundamentals of dismounted drill, and he has stood his first formal inspection in ranks.

He is ready for a change of pace and a moment of relaxation now, and he has the opportunity following chapel services on Sunday. A class outing takes place at The Citadel's beautiful beach house on The Isle of Palms. He will long remember the pleasure of this day for it is his first chance to evade the seemingly constant supervision of his squad leader, to relax from the burden of continually striving for perfection, and to meet his new classmates and enjoy with them the fellowship of the occasion.

With the return of the other upper classmen from summer furlough, the academic year gets underway. Now, the new cadets begin to realize what their four years at The Citadel will be like. As they become immersed in their studies, they begin to appreciate the need for the proper budgeting of their time and the necessity of developing good study habits. The days soon begin to fall into a routine, but never one that permits boredom, for in the classroom as well as in the other facets of their daily life, there are always new challenges to be met and additional responsibilities to be assumed.

In early fall the new cadets have progressed sufficiently far in their training to join officially the Corps of Cadets. It is a memorable occasion for the new cadet, and he will always remember the special retreat ceremony at which his class was formally presented to The Corps.

But all is not work for the plebe. There are numerous activities in which he will participate: intramural and Corps squad athletics, tea dances and formal hops, and, with the advent of football season, the thrill of watching the "Bulldogs" play in Johnson Hagood Stadium on a Saturday. Soon it is Parents' Day, and he has the opportunity to show Mom and Dad how well "their cadet" has progressed. It is a moment of pride for all concerned. In a few short weeks comes Christmas leave and a period of well-earned relaxation with family and friends.

The year is far from over, but the Plebe is well prepared for the second semester. He is fully adjusted to the demands of cadet life, he is confident in his own ability, and he shares in the proud heritage of the Corps of Cadets. The excitement of Graduation Week in the spring means different things to the different classes, but to the plebe it means the end of a difficult but rewarding year and the achievement of a new status: that of a Citadel upper classman.

TYPICAL WEEKDAY SCHEDULE

Morning:

6:30	First call for reveille
6:45- 7:10	Breakfast hour
7:10	Sick Call
7:15- 8:00	Unscheduled time (Police of barracks and preparation for class)
8:00-11:50	Class
12:10- 1:00	Dinner Hour

Afternoon:

1:00- 2:50	Class
3:00- 3:50	Drill and physical training
4:00- 6:00	Intramural and intercollegiate athletics, study time, parades, and extracurricular activities
6:10- 7:00	Retreat and supper hour
7:00- 7:30	Unscheduled time
7:30-10:30	Call to quarters (Evening study period)
10:30-11:00	Continuation of study time
11:00	Taps. Late lights authorized to some groups for study purposes

OFFICERS AND DIRECTORS OF THE ASSOCIATION OF CITADEL MEN—1969-1970

President: Otis P. Norcross, '35, 2450 Clairmont Road, N.E., Atlanta, Ga. 30329

Vice-Pres.: George D. Lott, '37, P. O. Box 5185, Columbia, S. C. 29205

Sec.-Treas.: Lt. Col. Hugo A. Pearce, Jr., '43, The Citadel, Charleston, S. C. 29409

Alumni Members, Board of Visitors

Col. C. Tucker Weston, M.D., '39, 1548 Kathwood Road, Columbia, S. C. 29644—Term expires June 30, 1971.

Col. Robert A. Daniel, '50, P. O. Box 247, Charleston, S. C. 29206—Term expires June 30, 1973.

Col. Samuel A. Wideman, '29, RR No. 3, Box 337-A, John's Island, S. C. 29455—Term expires June 30, 1975.

Alumni Members, Athletic Advisory Committee

James M. Leland, '52, P. O. Box 349, Orangeburg, S. C. 29115—Term expires May 31, 1970.

Leonard C. Fulghum, Jr., '52, 311 Middle Street, Mt. Pleasant, S. C. 29464—Term expires in 1971.

W. Burke Watson, '48, 12 Frank Clarke St., Sumter, S. C. 29150—Term expires May 31, 1972.

Directors

District No. 1—(Counties of Beaufort, Berkeley, Charleston, Colleton, Dorchester)—Herbert Wilcox, '51, 1043 Chambers Ln., Mt. Pleasant, S. C. 29464.

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District No. 3—(Counties of Clarendon, Kershaw, Lancaster, Lee, Sumter, Williamsburg)—Dr. John M. Rhame, '41, 37 Palmer Dr., Sumter, S. C. 29150.

District No. 4—(Counties of Chesterfield, Darlington, Florence, Marlboro)—A. J. Rainwater, '50, P. O. Box 1598, Florence, S. C. 29501.

District No. 5—(Counties of Chester, Fairfield, Lexington, Newberry, Richland)—James B. Murphy, '54, 4801 Datura Rd., Columbia, S. C. 29205.

District No. 6—(Counties of Aiken, Edgefield, Greenwood, McCormick, Saluda)—Alfred E. Dufour, '48, P. O. Box 726, Aiken, S. C. 29801.

District No. 7—(Counties of Abbeville, Anderson, Oconee)—Richard K. Allen, '43, 308 Kingsley Rd., Anderson, S. C. 29621.

District No. 8—(Counties of Laurens, Greenville, Pickens)—Maye R. Johnson, Jr., '54, No. 9 Ponderosa Rd., Greenville, S. C. 29607.

District No. 9—(Counties of Cherokee, Spartanburg, Union, York)—A. Brandon Taylor, '42, P. O. Box 2909, Spartanburg, S. C. 29302.

District No. 10—(Counties of Dillon, Georgetown, Horry, Marion)—Dr. James S. Garner, Jr., '43, P. O. Box 601, Mullins, S. C.

District No. 11—(Western North Carolina)—P. Peyton Warley, '56, 4635 Water Oak Rd., Charlotte, N. C. 28211.

District No. 12—(Middle North Carolina)—Alex S. Brown, Jr., '47, 2307 Danbury Rd., Greensboro, N. C. 27408.

District No. 13—(Eastern North Carolina)—W. Allen Cobb, '38, P. O. Box 352, Wilmington, N. C. 28401.

District No. 14—(State of Georgia)—William B. Endictor, '59, 1427-C North Cliff Valley Way, N.E., Atlanta, Ga. 30319.

District No. 15—(State of Florida)—Hampton J. Walker, '53, 2211 Sedgewick Place, Jacksonville, Fla. 32217.

District No. 16—(Armed Forces)—Floyd W. Brown, Jr., '55, Major, USAF, 8th Attack Sq., Box 10923, APO San Francisco, Calif. 96227.

District No. 17—(States of Maryland, Virginia, W. Virginia)—William C. Walters, Jr., '55, 8010 Washington Ave., Alexandria, Va. 22308.

District No. 18—(States of Alabama, Tennessee, Mississippi)—Robert H. G. Waudby, '59, P. O. Box 6728, Birmingham, Ala. 35210.

District No. 19—(States of Illinois, Indiana, Kentucky, Ohio, Michigan, Wisconsin)—Henry Dale Smith, '47, 1302 Ivywood Dr., Springfield, Ill. 62704.

District No. 20—(District of Columbia)—Bernard T. Renzy, III, '59, 6514 Tucker Ave., McLean, Va. 22101.

District No. 21—(States of Delaware, New Jersey, New York, New England, Pennsylvania)—Charles A. Klinger, '60, 187 Woodbine Rd., North Stamford, Conn. 06903.

District No. 22—(States West of the Mississippi except Pacific Coast States)—Col. David I. Dodenhoff, '27, 8002 Plum St., New Orleans, La. 70118.

District No. 23—(States of Washington, Oregon, California)—Frederick W. Shafer, '52, 1060 Marvista, Seal Beach, Calif. 90740.

District No. 24—(Puerto Rico)—C. Stanley Robles, '53, P. O. Box 8732, Santurce, P. R. 00910.

CITADEL CLUB PRESIDENTS

1969-70

Atlanta Citadel Club—Philip L. Young, 117th St., N.E., Atlanta, Ga. 30309 ('58).

Augusta-Aiken Citadel Club—H. Lee McConnell, '59, Box 1483, Augusta, Ga. 30903.

Beaufort Citadel Club—General E. A. Pollock, '21, USMC, Ret., P. O. Box 861, Beaufort, S. C. 29902.

Charleston Citadel Club—R. D. Moseley, '53, 34 Chalmers Street, Charleston. S. C. 29401.

Charlotte Citadel Club—H. C. Covington, '51, 6557 Folger Dr., Charlotte, N. C. 28211.

Chicago Citadel Club—William D. Wysockey, '51, 2716 Broadway, Evanston, Ill. 60201.

Delaware Valley Citadel Club—George E. DeHaven, '61, E. Paoli Medical Park, 1410 Russell Road, Paoli, Pa. 19301.

Dillon-Marion Citadel Club—William B. Cox, '42, P. O. Box 351, Mullins, S. C. 29574.

Edisto Citadel Club—Col. William R. Risher, '47, Carlisle Military School, Bamberg, S. C. 29003.

Greenville-Piedmont Citadel Club—McNeil Carpenter, Jr., '58, 6 Selwyn Dr., Greenville, S. C. 29607.

New Orleans Citadel Club—Leonard B. Smith, '53, McDermott International, Inc., P. O. Box 61961, New Orleans, La. 70160.

New York Area Citadel Club—Charles Klinger, '60, 187 Woodbine Rd., N. Stamford, Conn. 06903.

Pee Dee Area Citadel Club—Floyd C. Chitty, Jr., '40, Box 777, Hartsville, S. C. 29550.

Richland County Citadel Club—Jim Dodson, '55, DODD'S, 718 Devine St., Columbia, S. C. 29202.

Spartanburg Citadel Club—Trev A. Neuburger, Neuburger & Company, 824 E. Main St., Spartanburg, S. C. 29301.

Sumter Citadel Club—Dr. Perry Davis, Pinewood, S. C. 29125.

Triangle Citadel Club—G. S. Triplett, '49, 801 Academy Street, Fuquay-Varina, N. C. 29399.

Union County Citadel Club—Russell Jeter, '33, 122 Cherokee Ave., Union, S. C. 27526.

The Citadel Club of Greater Washington, D. C.—E. Clayton Embrey, Jr., '58, 9603 Parkwood Dr., Bethesda, Md. 20014.

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